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ABSTRACT

This empirical study, concerned with man-environment relationships in the home, identifies similarities and differences among family types; develops a body of normative, descriptive, baseline data about the home environments of a sample of lower middle class American families; and, gathers information regarding patterns of spatial behavior across various parts of the home. Data were collected on 147 male U. S. Navy sailors 18-21 years old by means of a behavior oriented questionnaire containing approximately 330 items about the respondents' homes and family practices. The findings indicated that there are a number of "universal" practices regarding use of the home environment and that clusters of environmentally related behaviors distinguish two "ecological styles", in terms of behaviors exhibited throughout the home: Type A (open/informal/socially interactive characteristics that are reflected in all family members); and Type B (who exhibit the opposite characteristics and set up firmer boundaries). Directions for further research are: 1) examine antecedent factors associated with the use of family environments; 2) compare patterns of the use of environments; and, 3) compare social, ethnic, and cultural groups. (Author/SJM)

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FINAL REPORT

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THE ECOLOGY OF HOME ENVIRONMENTS

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Final Report

Project No. 0-0502
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The Ecology of Home Environments

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TABLE OF CONTENTS

Page

Summary and Conclusions 1

Plan of the Report. 4

I. Introduction. 6

II. Procedure 24

III. General Descriptive Information 26

IV. Areas and Activities Inside the Home 34

V. Patterns of Use of Various Parts of the Home 60

VI. Discussion and Integration of Results 100

References 111

Appendices 119

LIST OF TABLES

Table		Page
1.	Summary of empirical relationships between use of bedroom doors and other aspects of family activity	62
2.	Summary of empirical relationships between use of the kitchen and other aspects of family activity	68
3.	Summary of empirical relationships between use of bathroom doors and other aspects of family activity	73
4.	Summary of empirical relationships between making "special rooms" available to others and other aspects of family activity	76
5.	Summary of empirical relatinships between recreation activities and other aspects of family activity	80
6.	Summary of empirical relationships between jobs around the house and other family activities	89
7.	Summary of empirical relationships between initial recipient of news and other family activities	92
8.	Summary of empirical relationships between biographical properties and family activities	95
9.	Summary of use of home environments by families	99

LIST OF FIGURES

Figure Page

1. Biographical characteristics of the sample 27
2. Geographic distribution of subjects' homes 29
3. Community location of the family home 30
4. Schematic diagram of the interior of the family home 32
5. Entrance into house used by family members and others 33
6. Schematic diagram of family kitchen 35
7. Schematic diagram of family dining room 36
8. Schematic diagram of family living room 39
9. Schematic diagram of family recreation room 40
10. Schematic diagram of subject's unshared bedroom 42
11. Schematic diagram of subject's shared bedroom 43
12. Schematic diagram of brother's bedroom 45
13. Schematic diagram of sister's unshared bedroom 47
14. Schematic diagram of parents' bedroom 48
15. Family member practices regarding keeping their bedroom door open or closed 50
16. Who knocks on closed bedroom doors 52
17. Subjects' free time activities 55
18. Location of free time activities 56
19. Family members' activities after dinner 58
20. Location of post-dinner recreational activities for family members 59
21. **General summary of results: Type A family pattern** 103
22. Home density and environmental use 108

SUMMARY AND CONCLUSIONS

The present study was designed to obtain information about ecological aspects of family home environments. The study was based on several assumptions: that family social exchange patterns would be reflected in how members used the physical environment of the home, that patterns of home usage might differentially characterize families, and that use of the physical environment could be described in terms of a set of integrated behaviors which cut across several facets of family functioning. Specifically, we attempted to gather data on the following issues:

(1) Normative, baseline data about home environments. This goal was addressed to development of a pool of data regarding idiosyncratic and relatively universal home environment practices. No such data was known to exist in the literature, particularly with regard to a broad set of environmentally related behaviors.

(2) Patterns of use of home environments. This objective focused on identification of patterns of behavioral use of home environments, e.g., do kitchen and eating, bedroom, bathroom, recreational activity related behaviors fit together in a coherent fashion, which might provide a basis for development of an "ecology" of family life?

(3) Family ecological "styles" in use of home environments. Beyond description of patterns of environmentally oriented behaviors, the question arises as to whether family "types" can be identified and distinguished in terms of patterns of behavior exhibited in home environments.

Procedure: Data were collected on 147 male U. S. Navy sailors by means of a questionnaire. The instrument contained approximately 330 items regarding the home environment of the respondent: the setting of the family home, eating related arrangements and practices, bedroom design and behaviors, use of bathrooms, living rooms and other rooms, free time activities, etc.

The results indicated (1) a number of general or universal home environment characteristics and practices which applied to a large portion of the family, and (2) clusters of environmentally related behaviors which distinguished family types.

General home environment practices: Several features of home environment behaviors were consistent across the sample, and centered around the kitchen, bedrooms and bathrooms. In certain respects, these data bear on issues of privacy and territorial behavior. With regard to eating and the kitchen, the data suggested that, while families differed in location of eating, female members were responsible for meal preparation. In addition, most families had fixed seating patterns at mealtime. Fathers typically sat at the end or head of tables; mothers were either at the opposite end, the center of the table, or the father's adjacent corner. But seating patterns were not rigid "territorial" behaviors. Seating was generally flexible and shifted with the presence of guests or when family members ate alone.

Privacy mechanisms were most evident in how bathrooms and bedrooms were used. Bathroom doors were closed and access permitted in direct relationship to the intimacy of the activity. Thus, in both eating and bathroom functions, space was used flexibly with "territories" and "privacy" tailored to situations. Similarly, door knocking was prevalent in most homes, perhaps a symbol of boundary respect, but varied according to members of the family, e.g., parental and sister bedroom doors were knocked on more so than were doors of young males in the family. Beyond these and several other practices, homes were consistent in certain respects in furnishings, e.g., kitchens were essentially identical in facilities, living rooms usually had a sofa, coffee table, end/lamp table complex, etc.

Type A and Type B families: The data suggest two characteristic family styles of use of home environments. One family pattern--Type A--seemed to be characterized by a cluster of environmental behaviors which were labelled as "open/accessible," "informal," "sharing/overlapping," "socially interactive." Type B families had firmer environmental boundaries between members, a more formal approach to use of space, and a lesser degree of family interaction and role sharing.

The Type A syndrome was reflected in all members of the family leaving their bedroom doors open for a variety of activities, ready availability of special rooms to one another, ease of access to one another's spaces, informality and use of the kitchen vs. dining room fo meals and entertaining guests, multiple use of rooms for various activities vs. having rooms serve singular functions, a high degree of social interaction reflected in frequent visits to one another's bedroom and in joint recreation activities, overlapping role responsibilities in job sharing around the home vs. unique assignments of family members to jobs, ease of sharing news in an informal way, less formality of seating at mealtime, etc.

Conclusions: From these data several conclusions and directions of further research emerged. For example, the use of home environments was consistent across families in certain respects and variable in other ways. All families indicated certain uniformities, and it remains for future research to determine whether such uniformities characterize other samples. Since the sample studied was roughly categorized as lower middle class in socioeconomic level, the question is open as to whether the data apply to other levels of the socioeconomic ladder. Also, it would be useful to determine the generality of these findings to other social, ethnic and national groups.

A second major finding was that families could be grouped into distinctive "ecological styles", in terms of a broad network of behaviors exhibited throughout the home. Because this study was inductive and normative in goal, no real explanation of these stylistic differences could emerge from the data. Future research can fruitfully address this question in terms of underlying factors associated with these behavior patterns. There was a bare suggestion that family size/density may be important. Other directions potentially worthy of exploration may concern family integration-disintegration, e.g., marital discord and harmony, presence of emotionally disturbed, delinquent, etc. children. Thus, the matter is totally open as to dynamics associated with these differences.

At the most general level, the study confirms the value of an ecological approach to interpersonal relationships, where several levels of interpersonal behavior are examined conjointly, where a longitudinal approach to phenomena is emphasized, and where the goal is to describe "system" functioning rather than isolated behavioral events.

PLAN OF THE REPORT

The report is divided into the following sections:

I. Introduction and Review of the Literature

This section presents a general analysis of the field of man-environment relationships, with a discussion organized around settings, methodology and goals of research in the field. Particular emphasis is given to studies which focus on environmental aspects of family life.

II. Procedure

This section outlines the procedures used in the present study and describes the home environment questionnaire developed in conjunction with the research. Appendix A contains a copy of the questionnaire.

III. General Descriptive Information

This part of the report presents a biographical summary of respondents and their families, a description of the geographic location of family homes, including an analysis of the type of community within which the home was located, and a gross description of the home and neighborhood. Appendix B contains detailed tabulations of these results.

IV. Areas and Activities Inside the Home

This section summarizes a considerable bulk of the data, essentially on an item-by-item basis, to identify aspects of consistent or universal use of homes by members of the sample. The data in this section are primarily normative and descriptive.

V. Patterns of Use of Various Parts of the Home

This part of the report presents result of analyses of interrelationships among 92 items of the questionnaire, selected on the basis of their potential contribution to patterns of use of home environments which cut across areas and activities. The section is organized around a series of empirically derived propositions which integrate data concerning behavioral consistencies in use of various parts of the home.

VI. Discussion and Integration of Results

This section considers the results in terms of: (1) general practices in home usage which characterize the sample as a whole, (2) patterns of behavior which characterize certain family "ecological styles" of use of home environments. Two general types of families are identified, based on differences in their use of homes. (3) A time-oriented description of the ecology of a family day, from the time members arise in the morning until they retire at night. In this daylong environmental history, the two types of families are contrasted.

I. INTRODUCTION

Purpose

The study reported in this paper concerns the ecology of home environments. The research was designed to provide: (1) normative, baseline data about home environments of a sample of American families, (2) information regarding patterns of spatial behavior across various parts of the home, and (3) information about "types" of families, differentiated according to home environment practices. Questionnaire responses were obtained from 147 respondents, young men, concerning how they and members of their families used various parts of their home. The questionnaire emphasized behavioral uses of the home environment rather than feelings, perceptions, and attitudes.

The Study of Man-Environment Relations

The behavioral and social sciences have only recently given extensive attention to the role of the physical environment in interpersonal relationships. On the other hand, the practicing design professions, e.g., architecture and planning, have only recently attended systematically to the potential relevance of behavioral science concepts to the design of environments. This blending of interests has resulted in a number of conferences, interdisciplinary professional organizations, newletters and journals, and a borrowing and diffusion of methods, concepts and strategies of analysis (see Craik, 1970b and Wohlwill, 1971 for historical perspectives on the newly emerging field of environmental psychology). In the last few years there has been a flurry of attempts at integration of ideas, as reflected in the diversity of materials in a recent volume of readings (Proshansky, Ittelson and Rivlin, 1970a) and in reports of several conferences (Esser, 1971; Pastalan and Carson, 1970; Wohlwill and Carson, 1972). The simultaneous confusion and excitement of man-environment research is also heightened by the dazzling array of disciplines which properly touch on facets of the field--psychology, sociology, anthropology, geography, architecture, planning and other environmental design fields, ecology, animal behavior. The result has been a sort of "United Nations" in conferences and in collaborative ventures, with value systems, concepts and methodologies traded and borrowed across disciplines. Ideas are recast in a variety of terms and frameworks, and communication is often tedious and frustrating, though challenging. Some speak of a new "unity of science, scientists and practitioners"; others view the situation as a tower of Babel. Only the future will tell.

Research on man-environment phenomena can be described in terms of three broad categories: (1) settings, (2) methods, and (3) goals. The following sections discuss each of these aspects of the field.

The Settings of Man-Environment Research

The Micro-setting: Small Groups and Families

Research and analysis of man-used environments has been conducted with varying degrees of thoroughness and jibes somewhat with the interests of various disciplines. At the micro-level, there are studies of small interpersonal units (dyads, small groups and families) and the immediate environment in which they exist (task or social settings, homes, offices). These studies approach small units from a variety of perspectives, including descriptive anthropological analyses of families (see Lewis, 1951, 1961 for analyses of the lives and environments of Mexican families), psychiatric and sociological analyses of relationships between social pathology and spatial/density properties of homes (Chapin, 1938, 1951; Chapin and Johanson, 1950; Grootenboer, 1962; Loring, 1956; Plant, 1930, 1951; Schmitt, 1957, 1963, 1966; Schorr, 1963), descriptive sociological studies of family rituals and practices (Bossard and Boll, 1950), conceptual and empirical analyses of use of parts of the home, such as bathrooms (Kira, 1966) and sleeping areas (Caudill and Plath, 1966), the home in general with regard to privacy (Chermayeff and Alexander, 1963), and to the general management of interpersonal relationships (Goffman, 1959).

Psychologically oriented analyses of micro-settings have generally not focused on intact, long-standing groups, such as families, but have studied groups in _ad hoc_ laboratory settings or in so-called exotic, unusual environments, e.g., where people are socially isolated for periods of time. Such studies have examined proxemics or interpersonal distance (see reviews by Lett, Altman and Clark, 1969; Patterson, 1968), relationships between space layout and interpersonal competition, work relationships, social interaction and territorial behavior (see reviews by Sommer, 1967a, 1969; Altman, 1970, 1971).

The present study is concerned with the micro-level of man-environment relationships, specifically the family home environment. The approach to be taken has several features: it is descriptive and quantitative, it attempts to portray, in an actuarial and normative fashion, how families use various parts of their homes. The goal is to identify possible "universal" practices regarding home environments and whether there are different "family ecological styles" which can be demonstrated empirically. Also implicit in the study is a general conceptual framework regarding the ecology of interpersonal relationships, to be described in a later section.

Neighborhood and Small Community Environments

The enormous number of studies of neighborhood and community environments cannot possibly be reviewed in detail. Such studies, varying in methodological approach from anecdotally based analyses to detailed observation and questionnaire techniques, have been conducted by anthropologists, sociologists, psychologists, architects, and urban planners. In the behavioral sciences the early Chicago school of sociology examined the behavior of street gangs and clubs and provided a glimpse into issues of human territorial behavior and the role of the street and the neighborhood in the lives of its inhabitants. In a recent analysis of a slum environment in Chicago, Suttles (1968) described relationships between various ethnic groups, partly in terms of their mutual and overlapping use of neighborhood environments. Similarly, Lewis (1959, 1961) and other anthropologists added descriptions of neighborhood and community environments to their portrayals of the social structure of various cultures. In analyses of suburban community developments, Festinger, Schachter, and Back (1950) and others demonstrated the effects of physical layout and proximity of dwellings on friendship patterns, as did Kuper (1953) in a study of an English housing development.

Another approach to the mutual impact of the neighborhood and community on group life is through analyses of groups in transition, moving from one environment to another. A study by Young and Wilmott (1957) described patterns of social interaction among residents of an old, established neighborhood in London and social interaction by members of the community who moved to a new project where the environmental configuration was different. In a vivid description, Yancey (1971) examined the behavior of new residents of the Pruitt-Igoe low-income housing project in St. Louis. He noted a large body of literature suggesting the importance of neighborhood relationships in urban lower socioeconomic areas, the critical role of the street as an extension of the home, and the way in which the design of the Pruitt-Igoe development totally violated the prior social structure of its new residents. He and others also discussed the dissatisfaction of residents with the development, their mistrust of neighbors, the difficulty of supervising children, the social anarchy that seemed to prevail, and the almost total absence of the social milieu with which the people were familiar. In addition, Yancey and others have discussed the evolution of new norms (or lack thereof) in the environment of housing developments, with gangs often controlling floors, hallways and stairways, the fantastic destruction, litter and breakdown in sanitation.

At a more molecular level, there have been a number of studies of behavior in parts of neighborhoods and community environments. For example, Jacobs (1961) offered a qualitative analysis of the role of sidewalks in urban American life. She considered them essential in child socialization and supervision, in that many people, almost an extended kinship group, were often involved in child rearing and in day-to-day social exchange. According to Jacobs, sidewalk life permits a variety of interpersonal relationships, provides privacy but congeniality, is an important source of social support, and is a place for exchange of views among residents. Play activities in courtyards and streets were the subject of a study by White (1953), pedestrian activities on crowded streets were observed by Wolff and Hirsch (1970), to cite a few examples of neighborhood and community studies.

A somewhat different approach to the link between neighborhood environments and social behavior involves the study of "cognitive maps" or "mental maps," or the perception of physical environments (see Stea, 1972 for a collection of studies on this topic and an issue of The Journal of Environment and Behavior, edited by Stea and Downs, 1970). As an example, Lynch and Rivkin (1959) asked people to "take a walk" in their neighborhood and to describe as they went along their impressions and observations, which were then content analyzed. A more typical approach toward understanding cognitive impressions of neighborhood environments was recently reported by Ladd (1970), who had adolescent Black children draw maps of their neighborhood in the Boston metropolitan area, which were then content analyzed to yield several types of perceptions which boys held of their neighborhood.

While it is evident that understanding the neighborhood or immediate community environment is important, the study reported here focused on the immediate home environment, with only sketchy data collected about the neighborhood and community setting.

Cities and Towns: The Large Scale Environment

There is a voluminous array of writing--scholarly and literary--on man in urban settings. In relatively modern times the sociologically oriented writings of Simmel (1951) and Wirth (1938) set the stage for current thinking in the behavioral and social sciences about the nature of urban life. They hypothesized that density and role relationships in urban settings lead to a psychological reserve, superficiality, and transitory set of relationships between people. In linking properties of the environment with social behavior, Simmel hypothesized that high sensory input, rapidly changing urban stimuli, and the unexpected nature of stimulation required a different interpersonal life style than that of rural areas, which eventually resulted in a more "distant" mode of dealing with others. More recent analyses of city life are found in Jacobs (1961) and Strauss (1961). Taking a social psychological approach, Milgram (1970) conducted a number of experiments on interpersonal helping, exchange and interaction in urban and rural settings. Michelson (1970) reviewed sociological approaches to city life from the early social area analyses of the Chicago school of sociology to the ecological approaches which emphasized land use, communication and organization concepts, to the socio-cultural approaches which emphasize the interplay of the physical and social environment.

Along a wholly different line are studies of perceptions, images and cognitive maps of cities. It is interesting to note that many of those with close links to the design professions have been unusually sensitive to the way in which environments are perceived and cognized. (See Stea, 1972, for a collection of such studies and Appleyard, 1970, for a recent example of cognitive maps of a city in Venezuela.)

The brevity of this review of research on urban settings is occasioned by the broad array of such studies and the fact that our interest is not at this molar level of analysis, except insofar as it assists in understanding the ecology of the family. Obviously, there is sufficient evidence to suggest that the macro-environment within which the family is embedded may have an impact on its functioning, and an attempt will be made to be sensitive to such effects. Nevertheless, the focus of the present study is on the immediate home environment of family groups.

Other Settings

In addition to the micro-environment of the home, the more molar environment of the neighborhood and the macro-setting of the city, scholarly attention has been devoted to a variety of other locales such as schools (Richardson, 1967), psychiatric wards and hospitals (Ittelson, Proshansky, Rivlin, 1970a, 1970b; Osmond, 1957; Sivadon, 1955), operating rooms (Goffman, 1961), obstetric wards (Rosengren and DeVault, 1963), prisons (Glaser, 1964; Sykes, 1958), college dormitories (Preiser, 1969; Sommer, 1969, 1970), libraries (Kasmar, 1970; Sommer, 1966, 1969, 1970), classrooms (Sommer, 1967b, 1970), an Israeli kibbutz (Davis and Olesen, 1971), offices (Kasmar, 1970), and museums (Winkel and Sasanon, 1970).

These studies also vary in goals and scope and yield a somewhat unorganized array of information about environments. However, there is a common theme which applies across settings--that of privacy. Osmond (1957, 1966) emphasized the importance of designing psychiatric facilities to insure patient privacy; Davis and Olesen (1971) described how members of an Israeli kibbutz achieved privacy in the context of communal living; Sommer (1970) reported on how college students employed dormitory rooms, lounges, the library and college classrooms to achieve privacy for studying; Sykes (1958) and Glaser (1964) argued for the importance of privacy in prisons; Preiser (1969) presented data on dormitory room arrangements in relation to privacy.

Another type of study in special environments is descriptive. For example, Ittelson, Proshansky and Rivlin (1970a, 1970b) examined social activities of patients in psychiatric wards, including isolated passive behavior (lying awake, sleeping, sitting around), isolated active behavior (writing, reading, pacing), mixed active behavior (eating, housekeeping, TV watching, and social behavior (games, talking and visiting). Similar data were collected by Altman and Haythorn (1967a) and by Altman, Taylor and Wheeler (1971) on socially isolated groups. Patterns of behavior among physicians, patients and nurses in an obstetrical hospital (Rosengren and DeVault, 1963), simulated movement and flow of visitors in museums (Winkel and Sasanon, 1970), and classroom and group seating and communication patterns (Sommer, 1969; Steinzor, 1950) have also been investigated. The present study is similar to some of these approaches in that it attempts to evolve a behavioral picture of how environments are used. But, it is unlike the Ittelson et al. and Altman et al. studies in that the data were obtained by means of a questionnaire rather than by direct observation.

Methodology in Man-Environment Research

Methodological approaches in the man-environment field have been classified by Craik (1970a, 1970b) as including (1) environmental display techniques (direct experience, simulated exploration, photography, etc., (2) response judgment formats (questionnaires, rating techniques, behavioral observations, (3) validational criteria (objective measures of environmental events), and other descriptive dimensions.

Actually, man-environment researchers have employed almost the full spectrum of methods available to the behavioral scientist, although, as in any field, certain individuals or those from specific fields have "favorite" techniques. At one end of the methodological spectrum are studies employing descriptive, qualitative, non-empirical approaches, such as the analysis of an obstetrical hospital (Rosengren and DeVault, 1963), prisons (Sivadon, 1955), psychiatric settings (Osmond, 1957, 1966), the Pruitt-Igoe housing development (Yancey, 1971), life in cities (Jacobs, 1961) and use of play areas by children (White, 1953). Most of these emphasize description, but a few are directed toward theory, even though they are primarily qualitative and non-empirical, e.g., Simmel's (1951) and Wirth's (1938) hypotheses about city life. It is difficult to categorize exactly the types of researchers who rely on qualitative analyses, but there appears to be a liberal representation of psychiatrists, some sociologists and anthropologists, and an occasional architect, planner or designer.

At a different level, one finds widespread use of self-report techniques by man-environment researchers, including questionnaires, ratings, interview and attitude measurement procedures. Examples of self-report studies are Chapin's (1938, 1951) examination of the effects of relocation on morale and adjustment, Bossard and Boll's (1950) analysis of autobiography and interview data to uncover family rituals, Caudill and Plath's (1966) interview data on family sleeping patterns in Japan, and Chapin and Hightower's (1965) interview study of household activities in high and low socioeconomic tracts.

These procedures have traditionally been the domain of social and behavioral scientists. More recently, a technique broadly adopted by social scientist and practitioner alike is the "mental map" or "cognitive map" procedure described earlier. This technique is almost a revival and extension of the introspection approach used early in the history of modern psychology, where a subject provided detailed data about his "mental processes" in reference to certain stimulus conditions. The parallel between the two approaches early in the history of sensory psychology and now in man-environment research may well reflect something about the stage of development of the field. In any case, the mental map procedure is being adopted by a variety of researchers in several disciplines and is rapidly yielding an accumulation of information on how people perceive their physical environment. As Stea and Downs (1970) indicate, the recent surge of cognitive map techniques may have received impetus from the writings of Lynch (Lynch and Rivkin, 1959), who attempted to describe cities and large physical areas in terms of their mental representations. In applying this method, several approaches are possible, e.g., literal drawings of maps by subjects, ratings on various questionnaire devices such as the semantic differential, or interview responses.

From a sociology of science perspective, it is interesting to note that cognitive mapping techniques have been vigorously adopted by all manner of man-environment researchers--psychologists, sociologists, geographers, architects, planners and designers. It may be that their popularity is due to the seeming ease of data collection in an area which has been of great concern to all, especially practitioner--namely, how people feel, perceive and emotionally react to their environments.

Another direction of methodology derives from the behavioral ecology approach of Roger Barker (Barker, 1963, 1968; Barker and Gump, 1964; Barker and Wright, 1955). His strategy conceives of behavior as wholly congruent with the physical environment and avoids the imposition of arbitrary units, responses or metrics on the stream of ongoing events. The goal is to be wholly descriptive and to search for natural units of behavior which occur in a fashion coterminous with properties of the environment. Barker and his associates have applied their ecological analysis techniques to the study of small towns (Barker and Wright, 1955), large and small schools (Barker and Gump, 1964) and several other settings. The techniques are laborious, the data voluminous and understanding requires extensive coding and integration. But there are signs that observation of ongoing behavior will occur more and more in the man-environment field. And there appears to be growing recognition that self-report measures of the rating scale, attitude questionnaire and mental map variety tap only one aspect of behavior and that observational or behavioral data are quite essential.

There are several types of observation techniques, many of which use pre-established observational categories. For example, Altman and Haythorn (1967a) and Altman et al. (1971) examined social activity and territorial behavior in pairs of socially isolated men. Social activities were described in terms of together behaviors (talking, playing games, etc.), solitary behaviors (reading, smoking) and sleeping/bed behaviors. They also coded territorial behavior, defined in terms of exclusive use of beds, chairs and areas of the living space. As described earlier, Ittelson et al. (1970a, 1970b) examined patient behavior in psychiatric settings using a similar coding scheme.

At an even more molecular level are specific behavioral measures of environment use. For example, Bechtel's (1970) hodometer technique is an electronic floor pressure indicator which measures traffic flow; Winkel and Sasanon (1970) developed a photographic simulation procedure in a museum setting. A variety of these and other techniques are reviewed in Proshansky et al. (1970a) and in Craik (1970b). Behavioral observation methods currently seem to be the "property" of behavioral scientists. The design professions have not yet applied these procedures on a large scale, perhaps because of their complexity, difficulty of application, requirements for extensive data analysis and statistical skills, But if recent conferences are any indication of the future, it is likely that observation of overt behavior will be undertaken broadly by those in the design professions, along with self-report measures.

The methodology of the present study falls somewhere between the self-report and behavior observation approaches. To describe the ecology of home environments, we developed a self-report questionnaire in which respondents described various features of their homes--floor plans of rooms, seating arrangements at mealtime, family practices regarding use of doors, and social interaction. Unlike the usual self-report instrument, the goal was a behaviorally oriented technique which emphasized what people "did" at home rather than how they "felt," "perceived" or "attitudinally reacted" to their environment. Thus, the questionnaire focused on how people actually used the home environment. Naturally, it might have been more desirable to visit homes to observe families, but costs, potential measurement bias and reactive features mitigated against direct observation.

Another form of methodology is the experiment, where certain conditions are independently varied. In the man-environment area, experiments have included studies of personal space (see Lettet al., 1969; Patterson, 1968; Sommer, 1967, 1969 for reviews of studies of interpersonal distance), territorial behavior (Altman, 1971; Altman and Haythorn, 1967a; Altman et al., 1971; Felipe and Sommer, 1966; Patterson, Mullens and Romano, 1971; Sommer, 1966, 1969; Sommer and Becker, 1969) and effects of spatial arrangements (Sommer, 1969). Experiments differ along a laboratory-field continuum, with some conducted in highly controlled laboratory settings and others undertaken in "real world" settings, e.g., libraries, schools, old age homes. The study reported here is non-experimental, since no attempt was made to vary aspects of home environments. On the contrary, the goal was to gather information about homes as they exist in their natural state.

While a variety of methods have been applied to man-environment phenomena, experimental and observational methods have been used primarily by behavioral scientists. Self-report approaches have been used extensively by both behavioral scientists and members of the design professions. Anecdotal and qualitative observation have been liberally used by everyone!

The Goals of Man-Environment Studies

Up to this point, studies of man-environment relationships have been differentiated in terms of settings and methodology. Another distinction concerns goals of research, which can be grouped as follows:

(1) Descriptive Studies

This goal is primarily empirical and inductive, and is designed to gather information in the absence of well-defined theories or hypotheses.

Such studies often serve the purpose of providing normative or baseline data. The work of Barker and his associates (Barker, 1963, 1968; Barker and Gump, 1964; Barker and Wright, 1955) typify this approach, where the intent was to provide a comprehensive picture of behavioral ecology in circumscribed environments. Many of the cognitive or mental map studies are also descriptive in their search for perceptual consistencies among residents of an area. The study reported here best fits the descriptive goal. Although working out of a general strategy, the objective is to describe similarities and differences among families in use of home environments without elaborate hypotheses about what variations might emerge or what they might be attributed to. At present we are searching for descriptive parameters to be applied eventually toward a theoretical system which views man-environment relationships as part of the social psychology of interpersonal relationships.

(2) Comparative Studies

This group of studies focuses on the impact of various features on man-environment phenomena, e.g., different types of housing environments, differences in ethnic or socioeconomic groups, the effect of different psychiatric ward or hospital features, etc. Such studies are often not directed toward an explicit theoretical framework or to tests of specific hypotheses but are addressed to the general question "I-wonder-what-the-differences-between-A-and-B-are!"

One quickly gains the impression that the bulk of man-environment research has either a descriptive or a comparative goal, which is really not too surprising since empirical knowledge in the field is relatively sparse. Descriptive and comparative studies can provide baseline and normative data from which more theoretically oriented studies can emerge. In addition, the diversity of disciplines, their differences in values, research strategies and concepts, makes it mandatory that some common set of findings be evolved, from which the diversity can be welded into other than a modern tower of Babel.

(3) Hypothesis and Theory Derived Research

Our impression is that a relatively small proportion of research in the man-environment area is directed toward specific hypotheses and/or theory. Examples of some hypotheses and theoretical notions include Chermayeff and Alexander (1963) on privacy; Simmel (1951), Wirth (1938) and Jacobs (1961) on cities; Proshansky, Ittelson and Rivlin (1970b) on the relationship between privacy, territoriality and crowding; Studer's (1969) operant oriented contingent environment approach, to name a few. Many of these positions are not always stated in the form of testable hypotheses, nor do the authors always provide empirical support.

While not testing well-developed theories, several studies have been conducted within the context of a general problem area, with research aimed toward development of a theoretical framework. For example, there are several studies on crowding and the impact of high density on social disorganization, e.g., Chapin (1938, 1951) Winsborough (1965), Winsborough and Davis (1963), Schmitt (1957, 1963, 1966), Freedman, Klevansky and Ehrlich (1971), Griffitt and Veitch (1971) Zlutnick and Altman (1972). In another area, Sommer's work on territorial behavior (Sommer, 1969, Sommer and Becker, 1969) has been concerned with the effects of personal space invasion, the role of territorial markers on preserving space, the functions of neighbors in protecting space, etc.

There have been theoretical analyses of animal behavior in relation to the environment. For example, Wynne-Edwards (1962) analyzed relationships between territoriality, group dominance and population control; Calhoun (1962, 1971) examined population growth in rats and mice; Ardrey (1966, 1970) proposed an evolutionary based approach to territorial behavior in social groups. Recently, Wohlwill (1971) presented a thoughtful analysis of man-environment phenomena in terms of level, nature, patterning and meaningfulness of stimulation, with an emphasis on hypo- and hyper-stimulation conditions. Wohlwill's thinking is particularly important because it weaves together ideas from sensory psychology, adaptation level theory and systems theory. While not offering fully developed hypotheses, his integration produces an important link between psychological concepts and man-environment phenomena. The same type of theoretical bridging is provided by Wynne-Edwards. Calhoun and Ardrey (regardless of one's agreement with their positions) from studies of animal ethology and ecology.

(4) Prescriptive Approaches

Several analyses--they may not actually be research in the usual sense of the term--have been directed toward recommendations for environmental conditions considered to be ideal or necessary for psychological well-being. For example, Osmond (1957, 1966) posited several conditions of privacy essential to the therapeutic process; Chermayeff and Alexander (1963) proposed design specifications for homes and communities which insured privacy; Yancey (1971), in an analysis of the Pruitt-Igoe low-cost housing development, identified environmentally linked problems and implied certain design solutions.

Prescriptive approaches are generally taken more by those faced with "real life" decisions in action settings. Psychiatrists, architects and planners seem more willing to provide diagnoses and/or recommendations for action regarding man-environment phenomena. Those in the behavioral sciences are more prone to description, comparative analysis and hypothesis development rather than diagnosis and solution of specific man-environment problems.

Summary

In reviewing the status of man-environment research, we first distinguished between various settings within which studies have been conducted, along a continuum of molecular/macro-environments. The study reported in this paper focuses on one micro-environment, the home, with only superficial reference to the larger environment. A second distinction was described as methodological, with studies based on several types of data: anecdotal or qualitative, self-report (questionnaires, interviews), observational experimental. The study reported here makes use of a self-report questionnaire, but is similar to observational studies in its focus on how people behave, rather than on their emotional, attitudinal, or perceptual responses. Finally, man-environment studies were differentiated in terms of goals: descriptive, comparative, hypothesis-testing and prescriptive. The present study is primarily descriptive and collected baseline and normative data regarding family use of home environments. Nevertheless, as described in the immediately following section, the study does derive from a general strategic framework regarding the ecology of interpersonal relationships.

Conceptual Framework of the Present Study

The logic and design of the present study derive from what has been termed an "ecological" approach to the study of interpersonal relationships (Altman, 1972; Altman and Lett, 1970; Altman and Taylor, 1972). This approach views interpersonal relationships as a complex behavioral system with the following features:

(1) Interpersonal relationships and behavior occur at several levels of functioning.

This proposition points to the idea that the process of interpersonal exchange not only involves verbal modes of interaction, but also includes nonverbal and environmentally related behaviors. Thus, people deal with one another by means of words, use of their bodies (e.g., smiles, eye contact, postures) and use of the physical environment. Environmentally related behaviors include interpersonal distance, use of areas and objects in characteristic ways, e.g., establishment of territories or areas of exclusive personal use, "markers" or delineators of personal space, such as signs and other territorial indicators, and use of privacy or boundary control mechanisms, such as doors and fences.

The present study assumed that an analysis of how a relatively stable group, the family, behaved with respect to its physical home environment would reflect aspects of the dynamics of the relationships among group members. In addition, an attempt was made to interrelate several facets of family functioning, including use of the physical environment in various parts of the home, family interaction patterns, role responsibilities and sharing.

(2) Interpersonal behaviors which occur at various levels of functioning fit together as a coherent "system."

Implicit in the first proposition is the idea that different levels of behavior fit together as a "system," with associated properties of substitutability, compensatory functioning and reverberating effects. That is, verbal, nonverbal and environmentally related behaviors can complement, substitute, and affect one another. A verbal statement can substitute for a smile or head nod, or vice versa, or can be combined with a particular body position or use of the physical environment, resulting in a wide repertoire of behaviors which are coordinated in various patterns. This logic led to a search for behavior patterns which cut across several parts of the environment and which (a) characterize families in general, and (b) enable the development of "types" of families who manifest different styles of interaction.

(3) *Interpersonal events are dynamic and change over time, but often achieve a level of stability as relationships evolve.*

Our earlier work not only focused on verbal aspects of interpersonal exchange, but examined changes in interaction over time (Altman and Taylor, 1972; Taylor, 1968; Taylor, Altman and Sorrentino, 1969). Other studies examined changes in verbal and environmental behavior over longer periods, for 8-10 days, in groups socially isolated from the outside world. Systematic changes in territorial behavior, stress reactions, performance and self disclosure were demonstrated to be a function of environmental and group composition characteristics (Altman and Haythorn, 1965, 1967a, 1967b; Altman, Taylor and Wheeler, 1971; Haythorn and Altman, 1967a, 1967b; Haythorn, Altman and Myers, 1966; Taylor, Altman, Wheeler and Kushner, 1969; Taylor, Wheeler and Altman, 1968). While these studies examined groups over relatively long time periods, compared with other studies in the area, the groups were *ad hoc*, with no extensive past or future. Resources in the present *study did* not permit direct longitudinal analysis, and the strategy of working with family groups was adopted for two major reasons. First, families provide a richness and variety of interaction among members not typically found in *ad hoc* groups. Second, they are usually stable groups, with a long history of interaction among members which extends into the past and toward the future. Thus, it was assumed that members had worked out consistent styles of interaction which would be reflected in use of the home environment.

(4) *The physical environment can be viewed both as a determinant and as a manifestation of interpersonal behavior.*

Typically, research in the social and behavioral sciences has emphasized the physical environment as a *determinant* of behavior, i.e., as an independent variable. For example, *studies have* focused on environmental design and propinquity among members or residents of a community as a critical factor in friendship (Festinger, Schachter and Back, 1950; Deutsch and Collins, 1951; to name a few). Or, in our own research on socially isolated groups, the impact of design factors of privacy and environmental stimulation were examined (Altman et al., 1971; Taylor et al., 1968, 1969). But an equally valid approach is to view *active use* of the environment as a behavioral event in the same way as *verbal and nonverbal* behaviors.

A considerable amount of research has begun to appear which focuses on environmentally oriented behaviors. For example, interpersonal distance, or the space people place between themselves and others, has been widely investigated in the context of Hall's (1966) notion of "proxemics." (See Lett et al., 1969 and Patterson, 1968 for a review of this literature.) On a more complex level, Sommer (1966) and Sommer and Becker (1969) examined choice of seats and use of territorial "markers" to protect space, as manifestations of social exchange. Our work on social isolation examined territorial behavior for objects and use of beds as environmentally related behaviors (Altman et al., 1971; Altman and Haythorn, 1967a). Again, the family home seemed an ideal place to study how the physical environment was actively used by group members in the management of their social relationships. While the distinction between environment-as-determinant and environment-as-behavioral event is not always clear, the present study emphasized environment as a behavioral manifestation of interpersonal relationships.

Background of the Research

Studies of family processes are voluminous in the sociological and psychological literature and deal with an array of phenomena far beyond the scope of the present report. Of particular interest is research on families which bears on the ecology of home environments--use of space and areas by family members, mechanisms for obtaining privacy, and the impact of environmental features on social interaction.

In line with the goals of the present study, there have been a number of accounts of home environments which are primarily descriptive. This is particularly true in cross-cultural studies by anthropologists, sociologists and psychologists. For example, Canter and Canter (1971) and Caudill and Plath (1966) studied Japanese homes from different perspectives. Canter and Canter undertook a qualitative analysis of the way in which urban Japanese families struck an adaptive balance between the extreme population density outside their homes and the maintenance of a private, flexible interior home environment. They suggested that Japanese architectural planning, from the home site inward, is sensitive to privacy needs and places considerable emphasis on site planning, including outside walls, even at the sacrifice of a view, to insure visual, if not auditory privacy. Inside the Japanese home, a dynamic, metabolic or biological approach to environments is implicit, with continual changes in spatial arrangements and multiple use of areas. The authors also noted that gross volume of space is not an important issue in Japanese homes, not only because of the flexible strategy of room arrangements, but also because attention to detail and the search for "perfection" in small things has developed over centuries as a Japanese value, e.g., the growing of small trees, the focus on small decorations, artifacts, and art works.

Michelson (1970), in reviewing studies of Japanese homes, also reports that the Japanese sharply distinguish between what is outside the home (public) and what is inside the home (private), and have exerted considerable effort to make homes personal via intensity of detail. It has been suggested that the unkempt and unorganized quality of city and neighborhood areas and the highly meticulous and particularistic nature of Japanese home environments reflects a coping and adaptive process which allows for simultaneous stimulation and access to public services and individualistic privacy and that both exist side by side in an unusual juxtaposition.

Beyond these qualitative characterizations, the study by Caudill and Plath (1966) focused on one aspect of Japanese family ecology--sleeping patterns. A major conclusion from their data is that apparent overcrowding of sleeping practices is only partly a function of space limitations, but is also part and parcel of socialization and child rearing practices. Their respondents reported preferences for multi-person sleeping arrangements, children slept in rooms with parents longer than American children, and extended kin often slept in characteristic relationships with other family members, e.g., with young children. For example, sleeping with parents was prevalent in their sample up to mid-adolescence, following which children slept alone or with siblings, and then repeated this cycle with their own children.

Another approach to descriptions of family environments is Lewis' (1959, 1961) study of Mexican families from different socioeconomic strata. While the major emphasis is on social dynamics of family life, his descriptions of the physical qualities of home environments makes evident the implicit constraints on family functioning imposed by the environment and the adaptive or coping mechanisms which families develop to maintain some level of viable functioning. The poorest of the five families he observed had seven members who lived in a windowless single room. The parental bed was located in the far corner of an attached kitchen area, separated from the main room by an improvised wall of empty crates, which provided some privacy. The family daughter and a baby also slept near the parents in the kitchen area, with four sons in the main room--thus reflecting the attempt to develop as much intra-family privacy as possible. The whole family could not eat together because of room and chair limitations. The working members of the family, all male, ate first; the others waited or ate on the floor near a hearth.

A second family, one step higher on the socioeconomic ladder, resided in a one-story urban tenement. They also had a one-room dwelling, with a patio and roof area which served as extensions of the family living space and which were used for laundry, cooking, chicken coops, etc. Although families in the tenement had long standing kin or friendship ties with one another, privacy was a central facet of community life, with doors usually closed and visiting inside homes very infrequent. The living area of the typical family was windowless, crowded with furniture and offered little privacy. The toilet was not private at all and was a constant source of concern to everyone, with attempts at rules for use, e.g., no use of the toilet during meals. But this was difficult since there was not enough room for all members to eat together, so that people ate throughout the day in a scattered fashion, and everyone used all facilities according to their own work and school schedules. For other families, at higher socioeconomic levels, homes had more room, more individual privacy and facilities, and sometimes even surpassed homes of middle and upper-class American families.

In sampling the literature on family environments beyond comparative studies, an inchoate array of studies emerges and cannot be easily integrated. One set considers specific aspects of family life in the environment, e.g., activity patterns, sleeping behavior, use of bathrooms. Implicit in these studies is a concern with certain generic phenomena, a most popular one being "privacy" mechanisms. Other issues include family rituals and socialization processes, family and neighbor interaction, etc. A second type of home environment study centers around issues of social adaptation, e.g., impact of home crowding on adjustment and pathology.

Specific Environmental Phenomena

Family privacy seems central to much of the literature on man-environment relations. Studies conducted in home settings range in content from those investigating other cultures, to general properties of the home and neighborhood, to specific areas of the home. At a very specific level, bathrooms and dressing activities seem of central importance. In the anthropological work of Lewis (1959, 1961), he reports on the constant difficulty of maintaining privacy in crowded Mexican homes. In one large family living in limited space, dressing and bathroom privacy was always difficult to maintain, had to be done in haste and often was a topic of teasing and a source of annoyance to all. In a similar anthropological vein, Davis and Olesen (1971) described how residents of an Israeli kibbutz used their environment to maintain some semblance of privacy in the communal environment, such as showering and bathing at off-times and volunteering for low person density tasks. In addition, an institutional norm existed where people did not visit one another at home during an afternoon rest period.

Kira (1966) undertook a qualitative analysis of bathrooms. In addition to the strong norm of total privacy in bathrooms in our culture for elimination purposes, they have also evolved to serve a variety of other individual privacy functions. These include hygienic activities, escape from noise, quarrels and other unpleasant social situations, and avoidance of responsibilities by children. The bathroom is a complex aspect of the social environment and also has an important part in role and status aspects of our lives. Family rules about use of bathrooms often exist, and Bossard and Boll (1950) reported that middle class families developed regulations for who goes in first in the morning, length of time for permissible use of the bathroom, etc.

In their broad study of family rituals, Bossard and Boll (1950) touched on a number of aspects of home environments. From analyses of autobiographies and interviews, they identified a number of rituals surrounding meal and eating times, recreation and entertainment, sleeping and bedroom activities and bathroom usage. They reported that families often did not eat breakfast or lunch together, but did so more often at dinner time and on week-ends, and more so by upper and middle vs. lower socioeconomic families. They also noted that middle class families were more formal at meal times, with dinner eaten in the dining room and family members having certain places at the table. They also observed that middle class families had regularized recreation activities in the home and organized work rituals. In addition to these aspects of family life, which are directly related to use of the environment, they noted a variety of other rituals related to greeting and saying good-bye, awakening and sleeping, punctuality and roles at mealtime.

An analogous type of study, limited to leisure activities, was undertaken by Chapin and Hightower (1965), who described recreation as a dominant family activity which centered around watching TV, reading and loafing. Their studies also extended beyond the immediate family home and included frequency of activities in various parts of the community. In another study, Preiser (1969) examined room arrangements in college dormitories and identified six characteristic furniture lay-outs and a variety of privacy mechanisms used by students, including name plates, personal decorations and use of doors. He also found that upper classmen sought more privacy and individuality, e.g., they kept their doors closed more often and had more personal items of equipment and furniture in their rooms.

Social Adaptation

A second line of research on family environments concerns relationships between amount and nature of space and social pathology. Implicit in much writing about home environments is the hypothesis that insufficient privacy leads to individual maladjustment, difficulties in family functioning, and a variety of social pathology indicators such as crime, delinquency and unsocialized behavior. (See Zlutnick and Altman, 1972 for a review of human crowding literature.) This is a very murky area, and research results are quite equivocal, partly because it is difficult to unravel cause and effect relationships between environmental conditions and pathology. Nevertheless, a number of authors have concluded that poor, overcrowded housing is associated with a variety of detrimental outcomes. For example, Chapin (1938, 1951), Schorr (1963), Loring (1956) and others concluded that there is a negative impact of poor housing on self identity, morale and adjustment, optimism about the future and a variety of other social pathology indicators. On the other side of the coin, Schmitt (1957, 1963, 1966) found no relationship between crowding inside the home and various indicators of maladjustment, although there were such relationships as a function of neighborhood and area population densities. Beyond the difficult matter of assessing causation from correlational data, there is a general lack of research on the impact of home environments on adaptive social behavior. Research on environment and social pathology, beyond that reviewed here, is suggestive but not definitive, is more often qualitative rather than quantitative and, all in all, suggests the need for more bedrock empirical work to provide a basis for understanding mutual relationships between social groups and their environment.

Goals of the Present Study

Throughout the introduction we have alluded to several purposes of the present study. At the most general level, the goal is to obtain empirical data about the mutual relationship of social interaction and the physical environment--on the assumption that the physical environment is both determinant and manifestation of social behavior and that it plays an active role in the management of interpersonal relationships. Because the family is a central focus of social interaction, because its members typically have a long history of interpersonal exchange, and because one might expect to see stable results of such a long history in use of the environment, the family was chosen as a focus of study. Beyond this general level, we sought empirical information relevant to the following issues:

(1) Normative or baseline data about use of home environments. This goal was directed to obtaining data regarding use of home environments on a broad sample of American families to identify (a) common or universal home environment practices and (b) idiosyncratic uses which distinguished types of families. Once baseline data is available, it may then be possible to undertake a series of comparative studies of different types, e.g., socioeconomic, ethnic, family size comparisons.

(2) Information regarding patterns of use of home environments. While it is assumed that home environments are complex and that there are familial and member uses which are idiosyncratic, we were interested in determining whether patterns of behavioral use of homes could be uncovered, which cut across areas and activities. For example, are kitchens, bedrooms and other areas used in consistent ways which fit together as a coherent set; do various activities such as eating, recreation and job sharing fit together with various environmental practices? If so, this would provide a basis for developing an "ecology" of family life based on a complex of behavioral-environmental events.

(3) Information about family "ecological" styles regarding use of home environments. Given certain patterns of behavior, there is a possibility that family types can be distinguished in terms of how they use their home environments. If so, this could provide one basis for uncovering family "styles" of interaction which can be linked eventually to other facets of their life. In addition, because data were collected in terms of various times of day, it may be possible to develop an "ecological" history of a family from the time they arise in the morning to the time they retire at night.

These goals were pursued through data collected by a questionnaire instrument. As indicated in earlier sections, there are a variety of methods which have been applied to the study of man-environment relations, from qualitative descriptions through experimental procedures. Our goal was to select a method which would permit collection of (a) large amounts of data, since it was not wholly clear which aspects of home environments to tap, (b) in a short time period and from many persons, with minimum resources, (c) behavioral rather than subjective, attitudinal or value type data, and which focused on what people "did" rather than how they "felt" about their home environment. This resulted in a questionnaire designed to approximate, in some respects, what might have been obtained by direct observation. In the following section, the details and methodological plan of the study are described more fully.

Summary

In a review of studies of man-environment relationships, the field was described in terms of units of study, methodological approaches and goals. Units or settings vary from macro-analyses of large urban areas to neighborhood and community locales, to micro-environments of homes and other specific areas. The present study focused on the micro-environment of the family home. Methodological approaches to the study of man-environment relationships span the range from qualitative analyses through self-report data, to observation and experimentation. The present study employed a questionnaire instrument designed to gather information on behavioral use of family environments. Finally, the goals of man-environment studies were described as varying from descriptive to theoretical to prescriptive. The present study is primarily descriptive and aims at developing (a) a pool of knowledge about broad consistencies in family use of their environment, (b) information about patterns of behavior which fit together, and (c) information about potential differences in family styles regarding home environment behavior.

II. PROCEDURE

Data were collected on 155 respondents (Ss), with the final sample consisting of 147 Ss. Eight were rejected from the sample because of incomplete answers to sections of the questionnaire. The data were collected in 1969 at the Naval Medical Research Institute, Bethesda, Maryland.

Ss were male U. S. Navy sailors who had just completed basic training at the Great Lakes Naval Training Center, Bainbridge, Maryland for advanced schooling in a variety of technical and administrative fields. Ss had been at the Bainbridge naval base for no more than a few days and were awaiting assignments to schools and classes. Ss were volunteers who were invited to participate in various research projects at the Bethesda Laboratory, some 70 miles away, in lieu of participating in various work details at the Bainbridge base. The volunteering rate was high.

The home environment questionnaire contained items grouped into the following areas (see Appendix A for specific items on the questionnaire.)

(1) Biographical properties of Ss and their families, e.g., age, education, vocational goals, parental background, occupations, family composition, size.

(2) The setting of the family home, e.g., geographical location of the home, size of town or city, distance of the home from various services and from friends, number and type of rooms in the home.

(3) Eating activities, e.g., layout of furniture in the kitchen and dining room, seating patterns at mealtime, use of the kitchen and dining room other than at mealtime, guests.

(4) Bedrooms, e.g., layout of furniture in bedrooms, use of rooms by all family members, bedroom door practices (open-closed) for various activities, door knocking.

(5) Bathrooms, e.g., activities by various family members, practices for keeping doors open or closed, knocking and use practices in the family.

(6) Special rooms, e.g., by parents, use and accessibility to others in the family.

(7) Living and family rooms, e.g., layout of furniture, when used and by which family members, types of recreation and other activities.

(8) Free time activities, e.g., types of recreation and other activities by family members, location of such activities, others present.

(9) Jobs around the home, e.g., types of jobs done by Ss and others in the home, degree of sharing of responsibility for jobs.

(10) Sharing news, e.g., where, by whom and to whom good and bad news, reprimands, etc. were given in the family.

The home environment questionnaire was administered to groups of 4-6 men. It had been planned to collect the data in an interview format, but pilot work indicated that Ss could easily provide the information in a questionnaire format. Because the questionnaire was lengthy, sometimes requiring three hours to complete, administration was done in small groups, with an administrator available for questioning. Numerous breaks were taken, whenever the Ss desired, and usually at least twice. Depending upon the schedule, Ss had lunch, coffee or Coke breaks.

Ss were fully informed of the purpose of the study, namely, to obtain normative or baseline information about how home environments were used. They were free to ask questions at any point, and were informed that they did not have to participate in the study if they did not desire to do so. Furthermore, they were told that they did not have to complete all parts of the questionnaire if they chose not to and could have their data omitted from the main study and destroyed if they so decided at the end of the session. Names and serial numbers were requested on each section of the questionnaire, primarily for identification, but Ss were assured of anonymity. Names and serial numbers were not recorded or stored on final data rosters.

III. GENERAL DESCRIPTIVE INFORMATION

Characteristics of the Subjects and Their Families

The great majority of Ss were in the 18-21 age range (83%), with 54% at ages 19 and 20, a not surprising finding since most were new recruits to the U. S. Navy (Figure 1)[1]. Many had completed high school

Insert Figure 1 about here

(46%), and a number had 1-2 years of college (29%). They were an upwardly mobile group, with over two-thirds indicating future plans to attend college or some other advanced school following their Navy career (69%), and about half (49%) had vocational goals of a managerial/professional nature.

Ss had a "middle America" family profile. About half of the fathers and mothers were in the 40-50 age range (fathers 50%; mothers 59%), with the fathers' mean age 50 years and the mothers' mean age 46 years. Somewhat less than half of the fathers (42%) and almost two-thirds of the mothers (64%) had completed 12 or more grades of education, the bulk of these being high school graduates (fathers 33%, mothers 48%). Over two-thirds of the fathers were in white collar or skilled and semi-skilled occupations (69%), and an additional 18% were in managerial/professional positions. Only 10% were in unskilled or service labor positions. Over half the mothers were employed, full or part time, with many in managerial/professional (8%) or white collar positions (31%). Slightly less than half were housewives (44%).

Two-thirds (86%) of the Ss were born in the Eastern, Central and South Atlantic areas of the United States, with the remainder having their birthplace in Southwestern and Western regions of the country. They varied in travel experience and mobility, with about one-third reporting traveling every few months, one-third traveling every few years, and about 40% indicating extended travel about once a year.

The typical family had four (24%) or five (25%) members, including parents, and a smaller number had six members (16%). 12% of the Ss had one other brother and no sisters, 10% had two other brothers and no sisters, 11% had one sister and no brothers, 8% had two sisters and no brothers, 8% had one sister and one brother and the remaining Ss were distributed among a variety of other sibling compositions. In a few instances there were grandmothers (8%), grandfathers (2%) or grandparents (1%) residing with the family.

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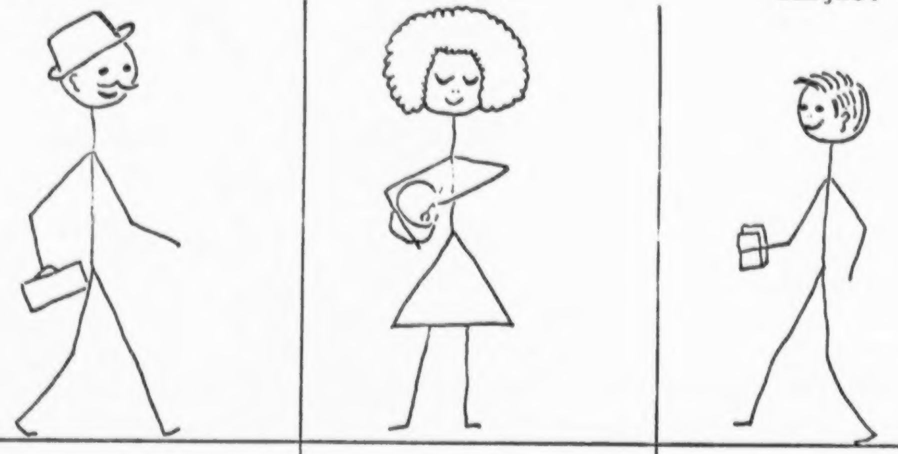
[1] Detailed frequency distribution data is presented in Appendix B.

Figure 1. Biographical characteristics of the sample



	Father	Mother	Subject
Age	50% were between 40 and 50 years of age with the mean age 50 years.	59% were between 40 and 50 years of age with the mean age 46 years.	83% were between 18 and 21 years of age with the mean age 20 years.
Education	33% completed grade 12, 18% went beyond the 12th grade.	48% completed grade 12, 16% went beyond the 12th grade.	46% completed grade 12, 39% went beyond the 12th grade.
Occupation	69% white collar or skilled and semi skilled 13% managerial/ professional	44% housewives 31% secretary or office worker 8% managerial/ professional	(Ss goal aspirations) 72% back to school after navy 49% managerial/ professional

Location and Setting of the Family Home

The geographic location of family homes corresponded with birthplace of Ss and their parents, with over three-fourths (80%) located in Eastern, Central, and South Atlantic states (Figure 2). The population density of the home area varied widely, with about one-quarter in each of rural, town, suburban and metropolitan areas. However, relatively few homes were located in areas with populations less than 2,000 (14%), slightly over one-third were in population areas having 2-25,000 persons (38%), and the remaining homes (46%) were located in population areas of 25,000 and up. Thus, as might be expected from national population data for this area of the country, Ss home locations ranged from small town settings through urban centers.

Insert Figure 2 about here

The home described by the S was his family home (97%), a house rather than an apartment (92%) and was owned by the family rather than rented (83%). Thus, the sample did not consist of many urban, apartment-dwelling families. Typically only the primary family group lived in the home, e.g., mothers, fathers, sisters and brothers (83%). Ss varied in how long they had lived in the referent home, almost equally distributed over categories representing 4 or fewer years, 5-11 years, and 12-22 years.

The homes were located on modest lots, in relatively built-up population areas, and had ready access to neighbors and community services (Figure 3). Almost two-thirds of the homes were located on lots of a half acre or less (62%), with the great proportion within less than 100 feet of the closest neighbor (76%). Furthermore, the nearest grocery was located less than a quarter mile from the family home (38%) and within a mile for almost all homes (84%). About half the homes were also within a mile of the nearest movie (45%). Finally, while the Ss nearest friend's home was usually more than a block away (72%), about two-thirds reported having a friend within five blocks of their home (65%). Thus, the family home appeared to be located in relatively built up areas, close to other people and services, on small to moderate sized lots, which one might expect in view of the middle class nature of the respondent and his family.

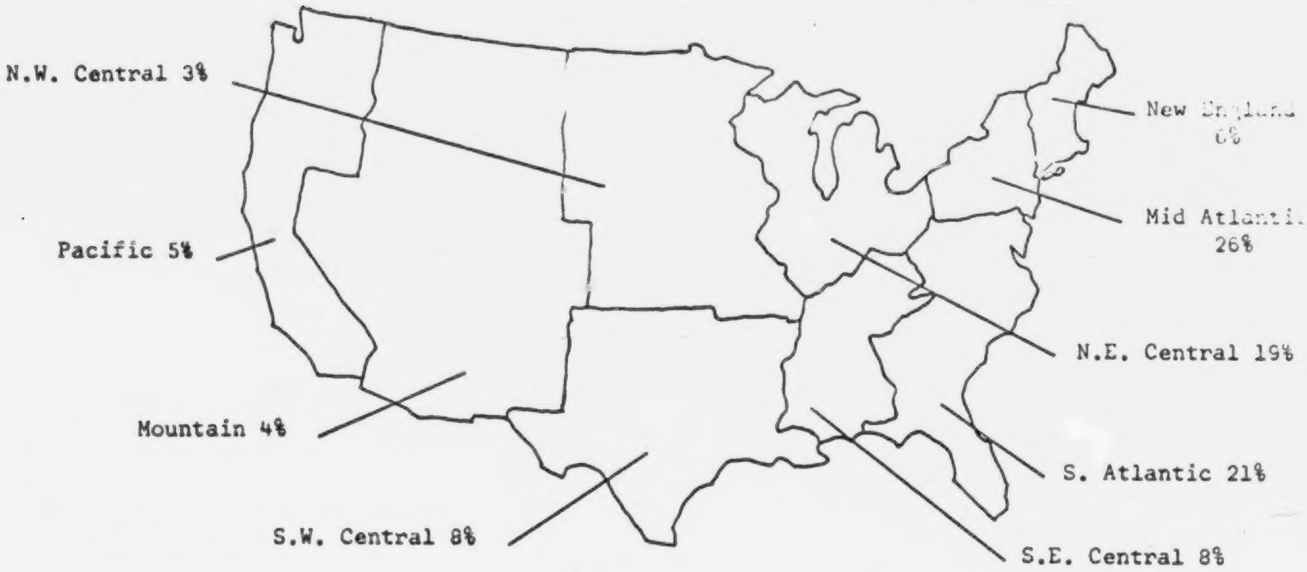
Insert Figure 3 about here

The Family Home: General Characteristics

The overall layout of the home

The typical family home was modest in specifications and space

Figure 2. Geographic distribution of subjects' homes


N.W. Central 3%
New England 6%
Pacific 5%
Mid Atlantic 26%
N.E. Central 19%
Mountain 4%
S. Atlantic 21%
S.W. Central 8%
S.E. Central 8%

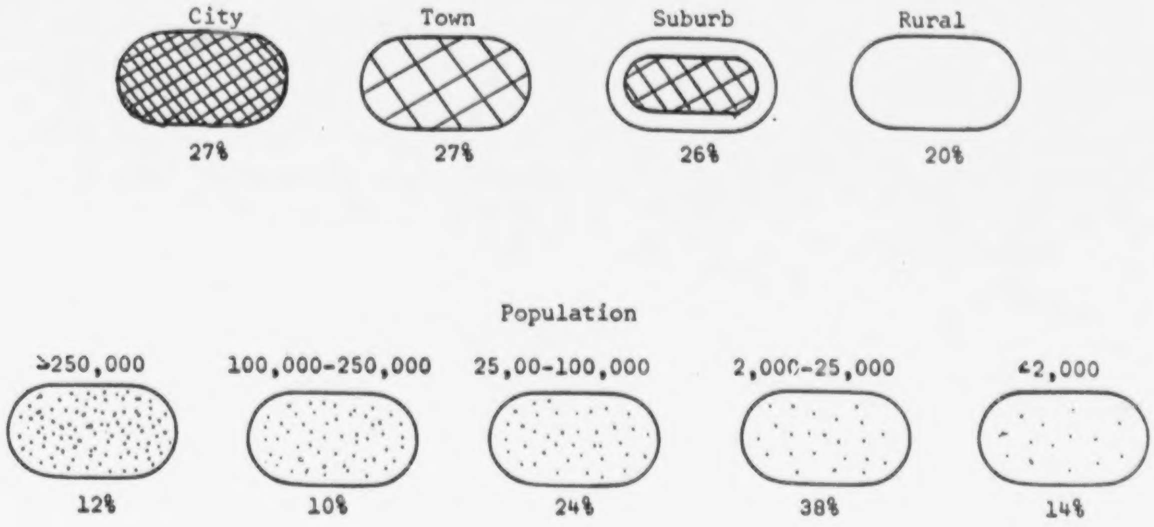
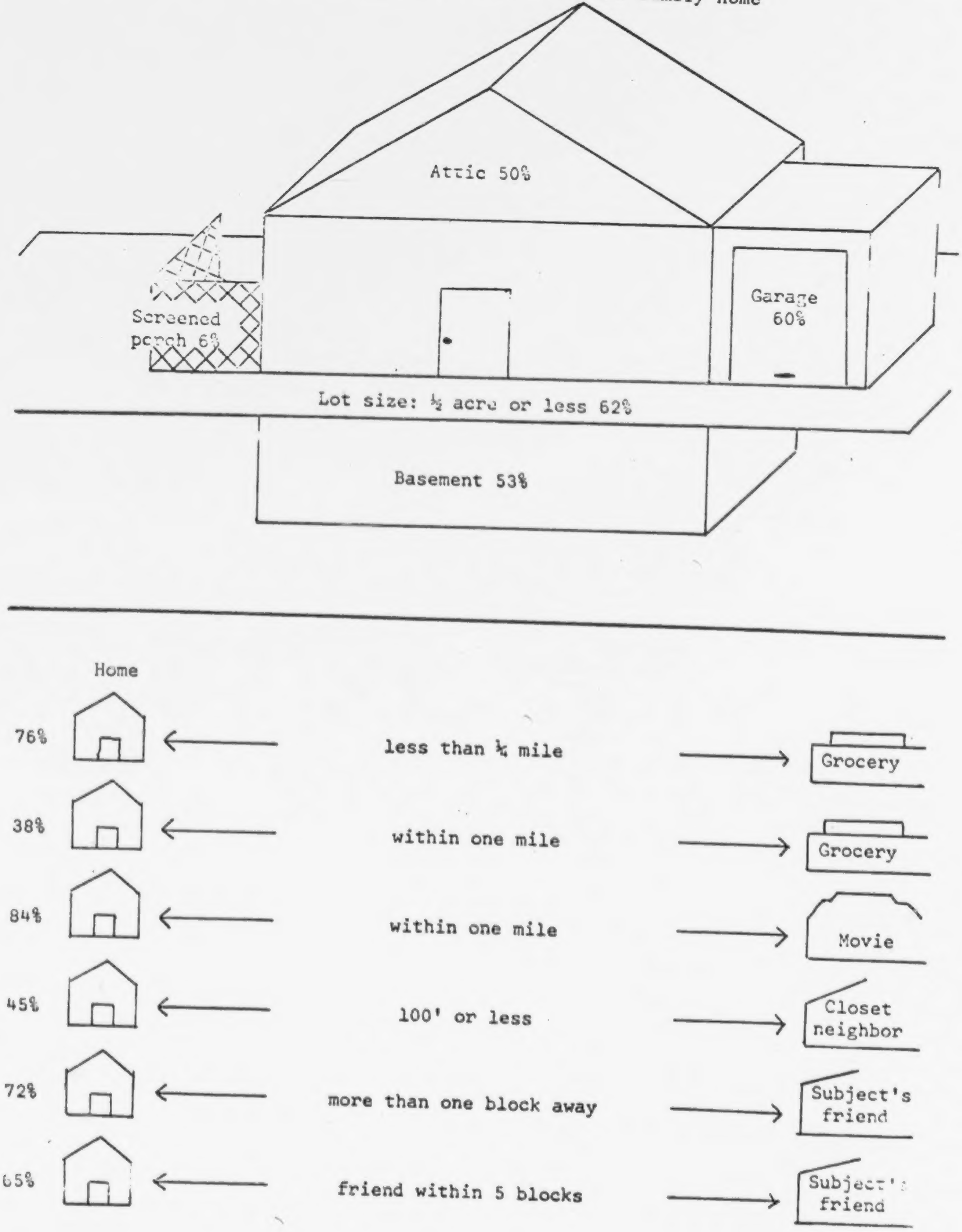


Figure 3. Community location of the family home


Attic 50%
Screened porch 6%
Garage 60%
Lot size: ½ acre or less 62%
Basement 53%
Home
76%
less than ¼ mile
Grocery
38%
within one mile
Grocery
84%
within one mile
Movie
45%
100' or less
Closet neighbor
72%
more than one block away
Subject's friend
65%
friend within 5 blocks
Subject's friend

(Figure 4). All homes had living rooms (99%) and kitchens (99%), and

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Insert Figure 4 about here
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many had dining rooms or dining areas (76%). There typically were 2, 3 or 4 bedrooms (16%, 54%, 24%, respectively), with only about 7% having 5 or more bedrooms. Half of the homes had only a single bathroom (49%), and a fair number had one and one-half bathrooms (44%). Beyond these basics, homes varied in other facilities. 60% had garages or carports; basements and attics were present in about half of the homes (53% and 50%, respectively). Family rooms or study/den area appeared in only about one-third of the homes (29%, 33%) and such areas as screened porches and laundry rooms were rare (screened porches 6%, laundry areas 14%). Thus, the general facilities and space available to the typical family home matched the general lower middle and middle class socioeconomic level of the sample.

Entering the home

The great majority of homes had two or three entrances (46% two entrances; 42% three entrances), typically at the front, rear and side of the house. Family members differed somewhat from one another in use of entrances, and the family differed from guests and visitors with regard to where they entered the home (Figure 5). The data are very

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Insert Figure 5 about here
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marginal but seem to suggest that male members of the family (the S, his brothers and father) used the side and rear entrances to a slightly greater extent than the sister. Females were more apt to use the front entrance, compared with males in the family. Guests and neighbors primarily used the front entrance, and to a greater extent than family members. For example, neighbors and friends of the S used the front entrance about half of the time (51%, 46%, respectively), and parental guests entered via the front door most of the time (74%). In addition, salesmen or delivery persons typically used the front/main entrance (74%).

A comparison of front door vs. combined rear and side doors indicates that males in the family tended to use the side and rear entrances slightly more frequently than the front entrance; sisters tended to enter the house primarily from the front, as did the mother. On the other hand, guests typically entered by the front entrance, although the guests of the S were relatively equal in their use of either entrance.

Figure 4. Schematic diagram of the interior of the family home

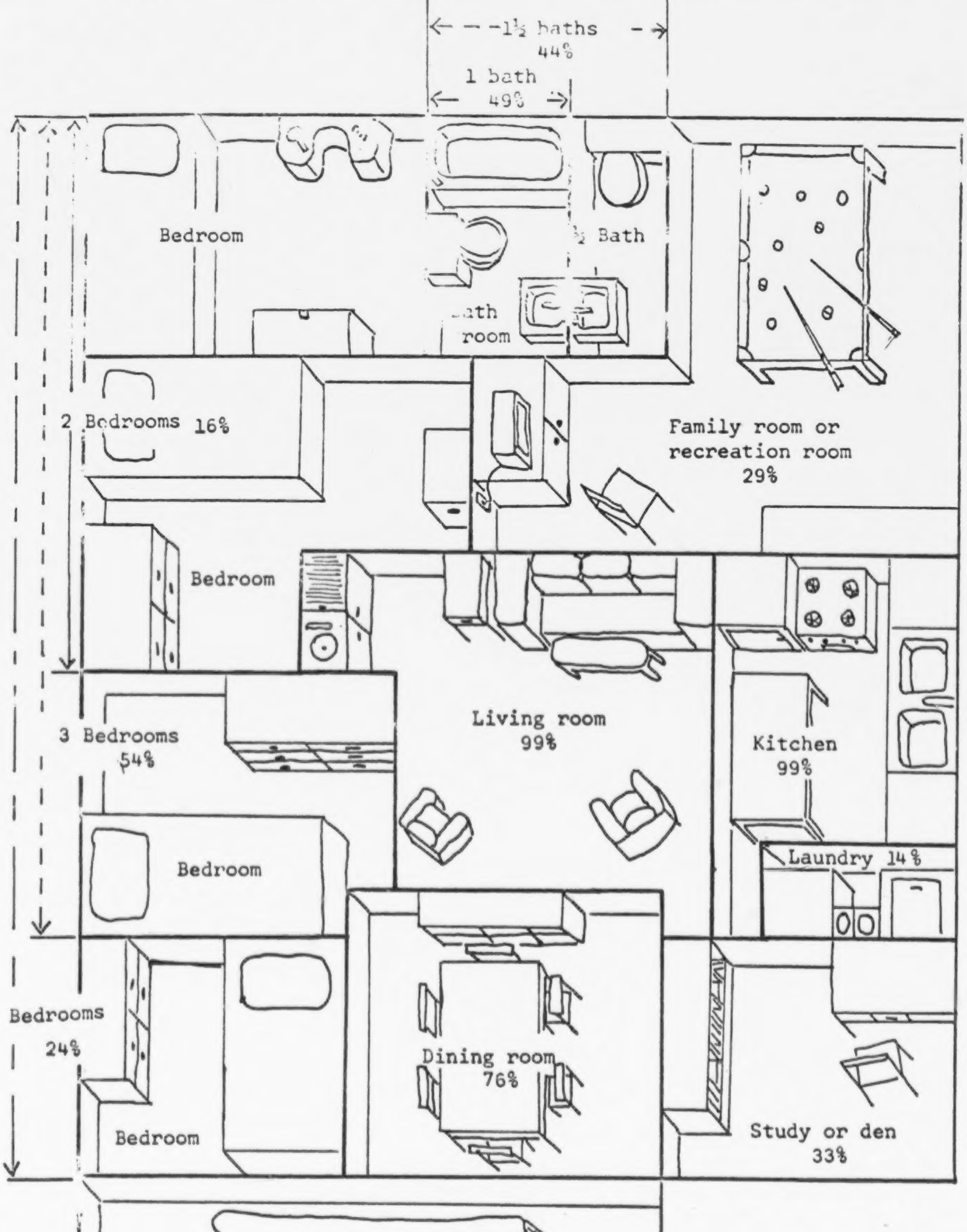
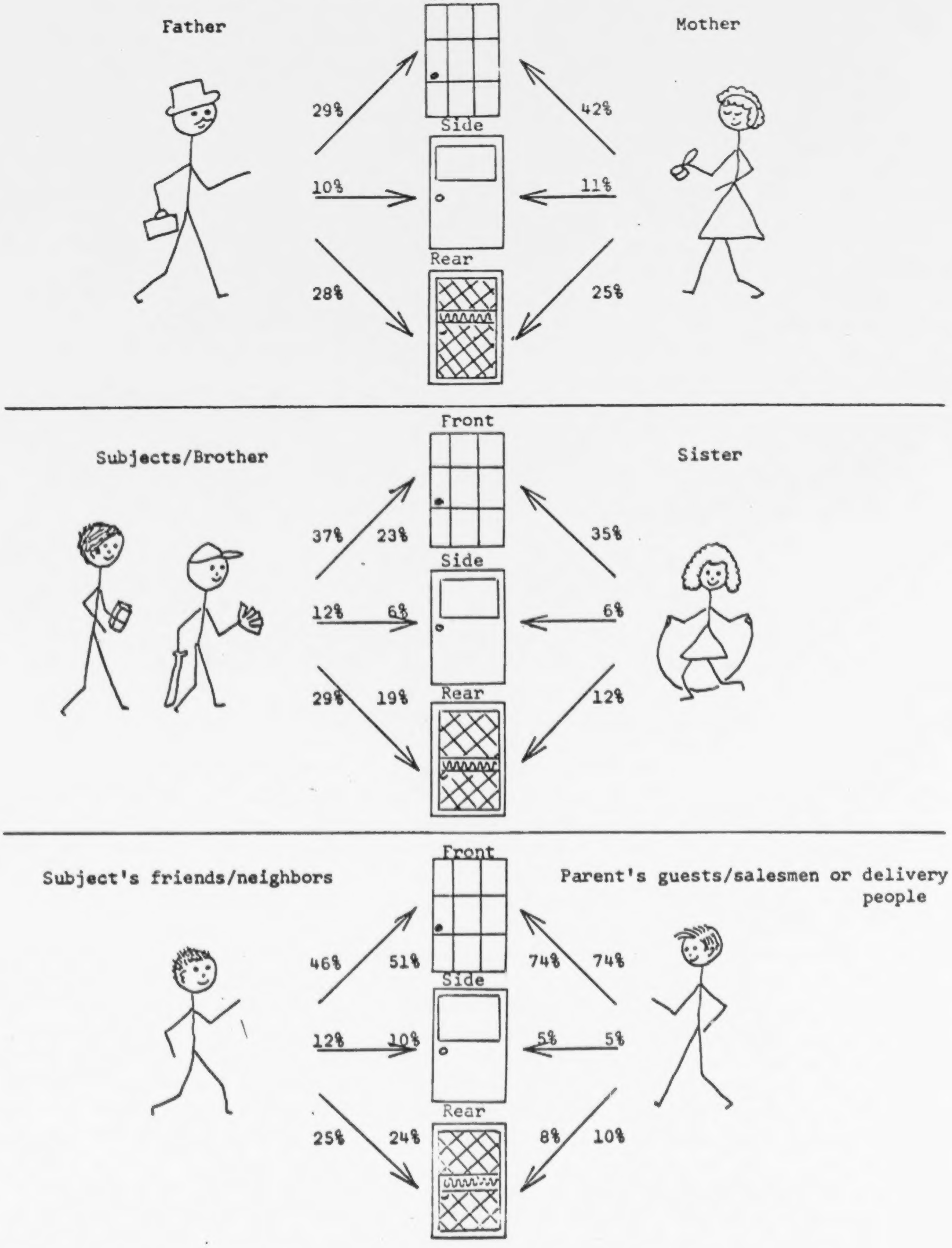

1½ baths
44%
1 bath
49%
Bedroom
½ Bath
Bath room
2 Bedrooms 16%
Family room or recreation room
29%
Bedroom
Living room
99%
Kitchen
99%
3 Bedrooms
54%
Bedroom
Laundry 14%
4 Bedrooms
24%
Dining room
76%
Bedroom
Study or den
33%
Garage or carport
60%

Figure 5. Entrance into house used by family members and others



IV. AREAS AND ACTIVITIES INSIDE THE HOME

The following sections contain room by room descriptions of furniture layouts and activities in various parts of the home. First, kitchen and dining room activities and layouts are described. Then, recreational activities are examined, with a focus on living rooms and family/recreation areas. Finally, bedrooms, bathrooms and special rooms are described.

Family Eating Patterns: Kitchens and Dining Rooms

Figures 6 and 7 present schematics of furniture in kitchens and dining rooms. Kitchens contained the usual standard equipment such as a table (75%) or eating bar (15%), stoves (100%), sinks (100%), cabinets (98%) and refrigerators (100%). Less frequently appearing items in the kitchen included washing machines (12%), freezers (3%), dryers (5%), miscellaneous tables (6%) or even closets and pantries (10%).

Insert Figures 6 and 7 about here

The great majority of dining rooms had a table (91%), with the remainder of the furnishings quite variable. For example, half had a buffet (50%) and/or a hutch (27%). China closets (23%), cabinets of various types (12%), bars (9%), desks (14%), bookcases or trophy cases (16%) and small tables (13%) were also found in dining rooms. TVs and telephones appeared quite infrequently (6% and 7%, respectively). (Surprisingly, there do not appear to be many chairs in dining rooms, although they may well not have been drawn in by Ss.)

In general, families ate in the kitchen, although there were some differences between meals. Breakfast and lunch were typically eaten in the kitchen (72% and 62%), whereas the dining room was used less often for those meals (24% and 29%). However, dinner seemed to be about equally often eaten in the kitchen and dining room (kitchen 48%, dining room 44%).

In addition, there were differences in which meals were eaten together by the whole family. Typically, breakfast and lunch were rarely eaten together (63% and 61% reported hardly ever eating together and only 16% and 14% reported eating these meals together every day or most days). On the other hand, most families ate dinner together every day or most days (73%). Thus, for those times when the family ate together (dinner), the dining room was used more frequently than for those meals which people probably had "on the run" or for which they were not together.

Meals were usually prepared by the mother (86%) with assistance from sisters (37%) or from an assortment of other members of the family (40%). Cleaning up after meals and washing dishes was done by the mother in most

Figure 6. Schematic diagram of family kitchen

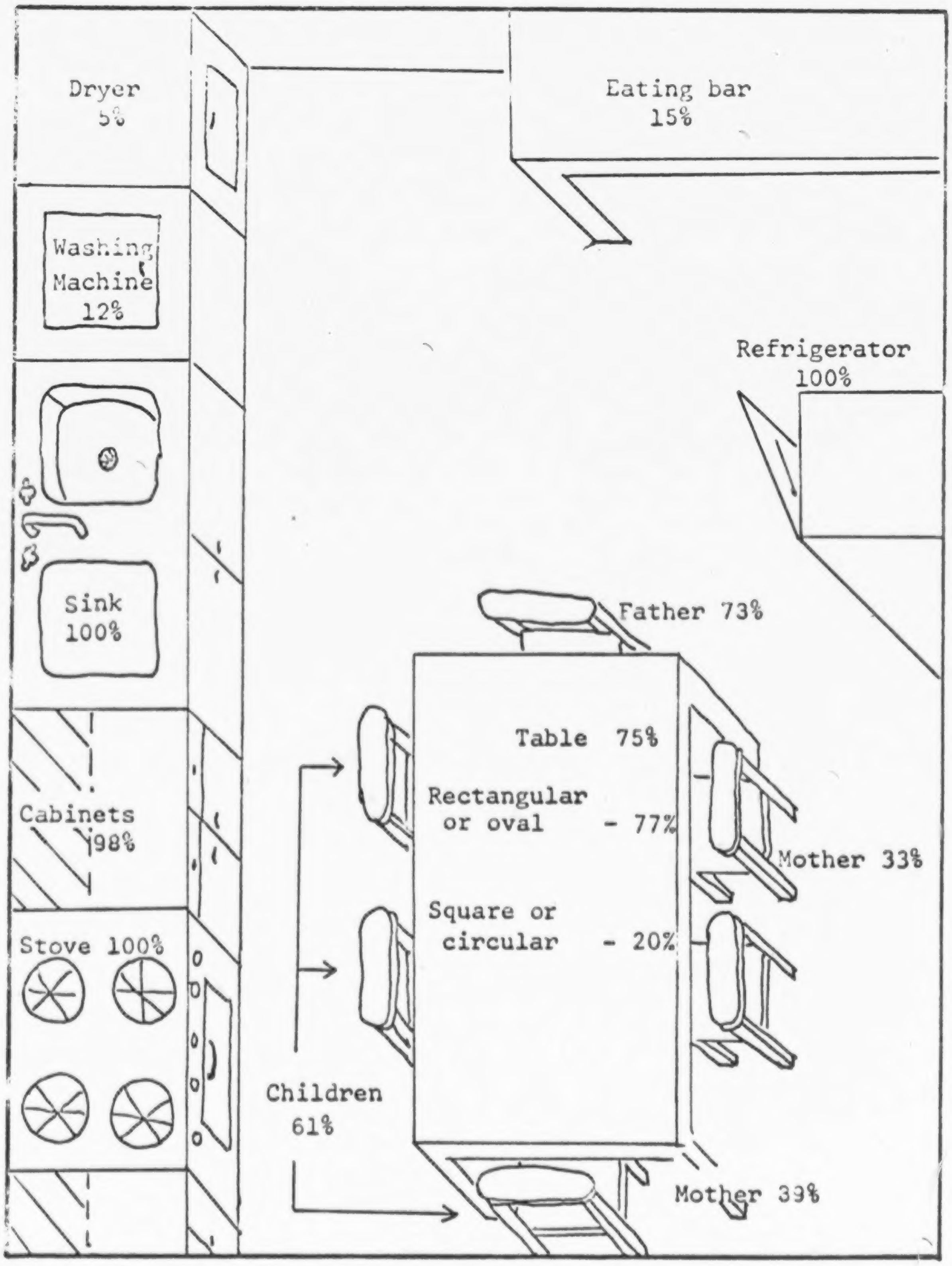
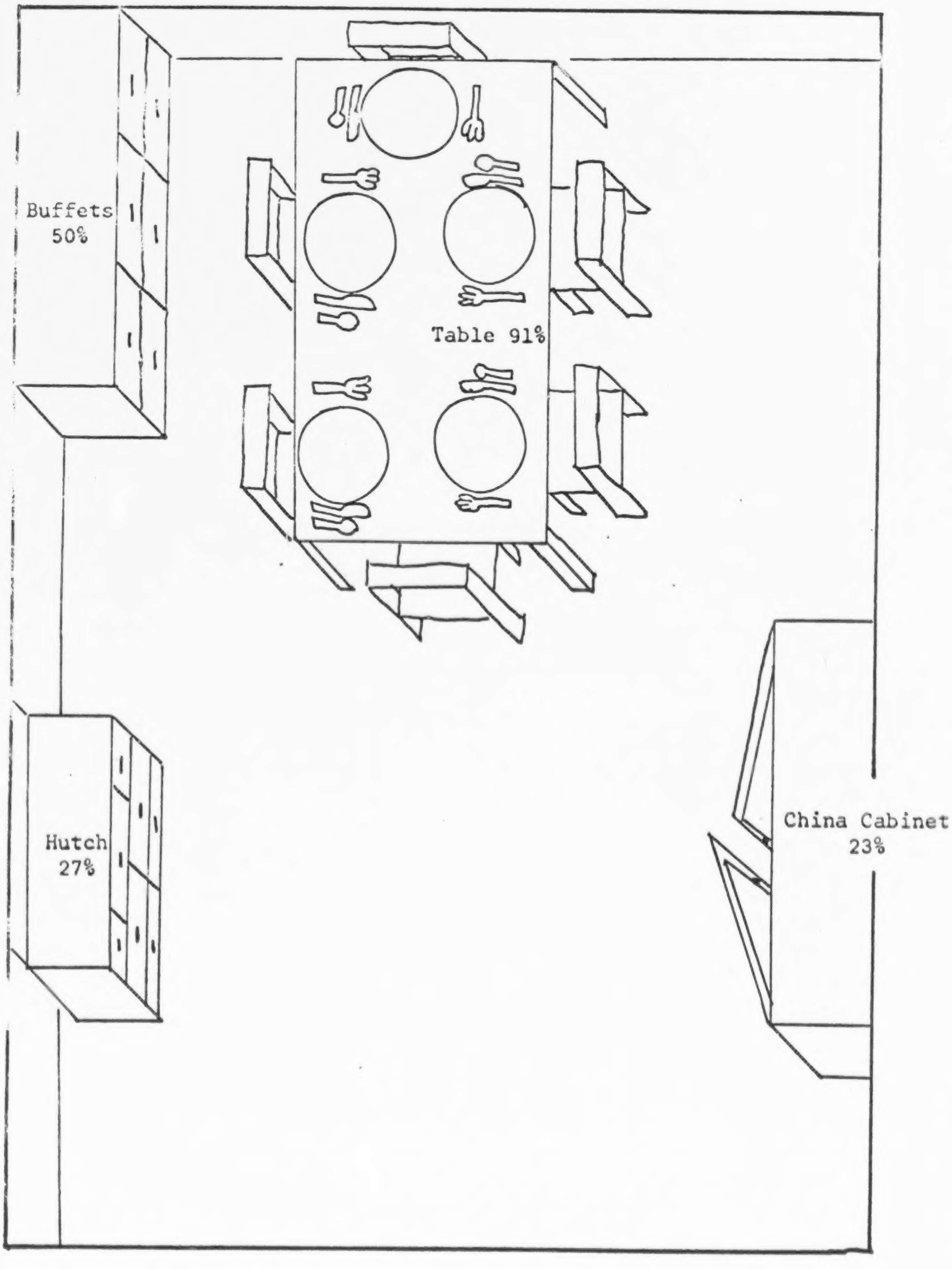

Dryer
5%
Eating bar
15%
Washing Machine
12%
Refrigerator
100%
Sink
100%
Father 73%
Table 75%
Rectangular or oval - 77%
Square or circular - 20%
Cabinets
98%
Mother 33%
Stove 100%
Children
61%
Mother 39%

Figure 7. Schematic diagram of family dining room


Buffets
50%
Table 91%
Hutch
27%
China Cabinet
23%

cases (61%), with sisters less often (30%), or with sisters assisting (17%). Other members of the family only occasionally helped in the clean up. Also, mothers and sisters seemed to be responsible for setting the table (mother 58%, sister 29%), with the remainder of the family playing a less active role. Not surprisingly, the female members of families seemed to be central figures in the family eating process.

The data also indicate that families sat at characteristically shaped tables and in regular seating patterns. For example, three-fourths of the tables were rectangular or oval (77%), and about one-fifth were circular or square (20%). Each member of the family also had a fixed seating place at the table when all ate together (79%) and less often when members of the family ate separately (27%), usually the place he sat at with the family. The fixed seating pattern arrangement broke down further when there were family guests. Here only one-fifth of the Ss reported regular seating patterns when guests were in the home (22%). Thus, seat "territories" existed primarily when the family ate together and were not as strong when they were not all together or when outsiders were in the family setting.

When the family ate together, there also seemed to be characteristic seating locations for all members. Considering rectangular or oval tables, fathers typically sat at the end or "head" of the table (73%). Mothers varied somewhat more in seating location, about equally split between being seated at the end of the table (39%) or at the father's adjacent corner of the table (33%), and less often in the center (18%) or at some other location. When joint mother-father seating patterns are considered, mother end-father end patterns appear about as often as mother at father adjacent corner-father end patterns (28% and 28%), with the mother center-father end pattern occurring less often (12%). The children were spread out around the table according to the following distribution: ends (8%), corners (20%), center (10%), combinations of the preceding (61%). The data do not show any particular sex distribution of children or sex segregation around the table. The overall pattern, then, is that fathers sat at heads of tables, mothers sat at opposite ends or at corners (primarily adjacent to the father) and children were scattered about.

One other facet of seating practices involved "ownership" of particular chairs at the table, in addition to "places." Most Ss reported no one having a particular chair (80%), even though places were characteristically assigned to family members. The only evidence for chair and place ownership was for fathers, although only infrequently (12%)

In summary, there were relatively characteristic eating patterns in the sample of families studied, with eating primarily taking place in the kitchen for meals other than dinner, and dinner being equally split between dining rooms and kitchen. The females in the family were primarily responsible for preparing, managing and cleaning up after meals. The family sat at a rectangular table, had fixed seating patterns, which became less specific when the family was not eating together or when a guest was in the home. Various members of the family had particular places at the table, with the father typically at the head and the mother split between the opposite end to father or adjacent corner to father, and children distributed throughout other positions.

Not only did fixed seating patterns become less evident when guests were in the home, but there was also a shift of location of the meal away from the kitchen and to the dining room. For example, when family guests were present, eating occurred primarily in the dining room (69%), although when guests of the S were in the home, the dining room and kitchen were used equally (47% dining room, 41% kitchen).

Living Rooms

Figure 8 presents a general layout of the types of furniture found

Insert Figure 8 about here

in living rooms. The great majority had one or two sofas (74% and 16%, respectively), or some version of a sectional sofa (12%). Typically, associated with the sofa were a coffee table (58%) and end tables (one end table 20%, two end tables 41%). These tables frequently had lamps (one 12%, two 40%, three or more 11%).

Most living rooms also had chairs, the majority with two (49%) or three chairs (20%), and a few with only one (12%) or four or more chairs (14%). Beyond these basics, there was considerable variety with regard to additional lamps, other tables, floor lamps, hanging lamps, etc.

For recreation, television sets dominated, appearing in two thirds of the living rooms (64%). A smaller number had stereo and record players (47%) or radios (5%). About one-third had bookcases (34%) or magazine and record racks (10%). There were occasional pianos (13%) or organs (6%), but TV seemed to be the central recreational facility in living rooms.

Decorative items were relatively infrequent, with plants and flowers in only a few homes (10%), as were mirrors and other wall hangings (6%), pictures (24%), etc. "Luxury" items, e.g., fireplaces and lounge or reclining chairs, were relatively infrequent (19%, 7%).

In summary, living rooms seemed to be relatively basic in their furnishings, recreation and luxury materials. The sofa/coffee table/end table/lamp unit was quite prevalent, as were a number of chairs for seating. Beyond these furnishings, and TV stereo recreation items, living rooms showed considerable variability in furnishings.

Recreation and Family Room

Figure 9 diagrams recreation and family rooms, which appeared in

Insert Figure 9 about here

Figure 8. Schematic diagram of family living room

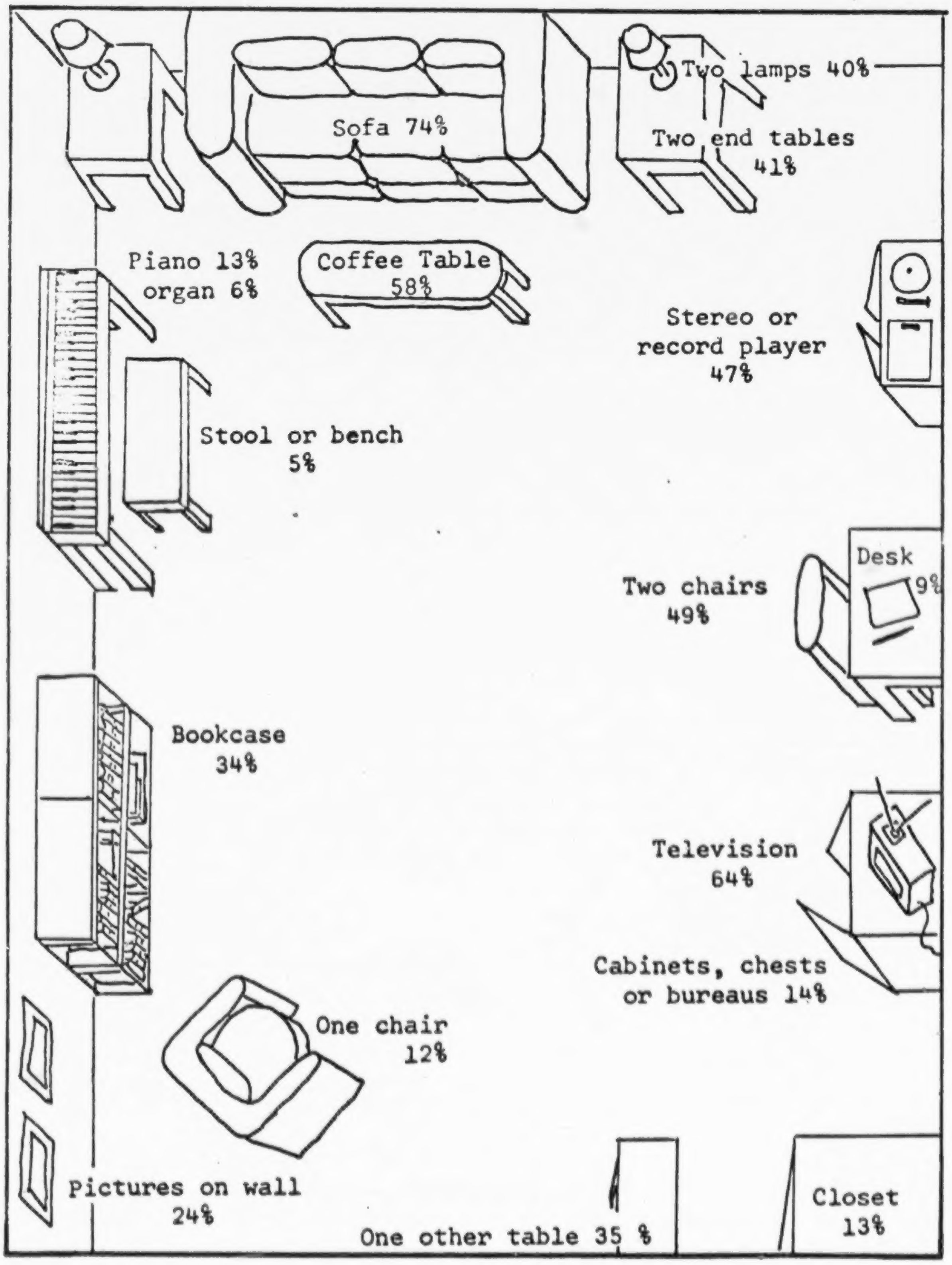
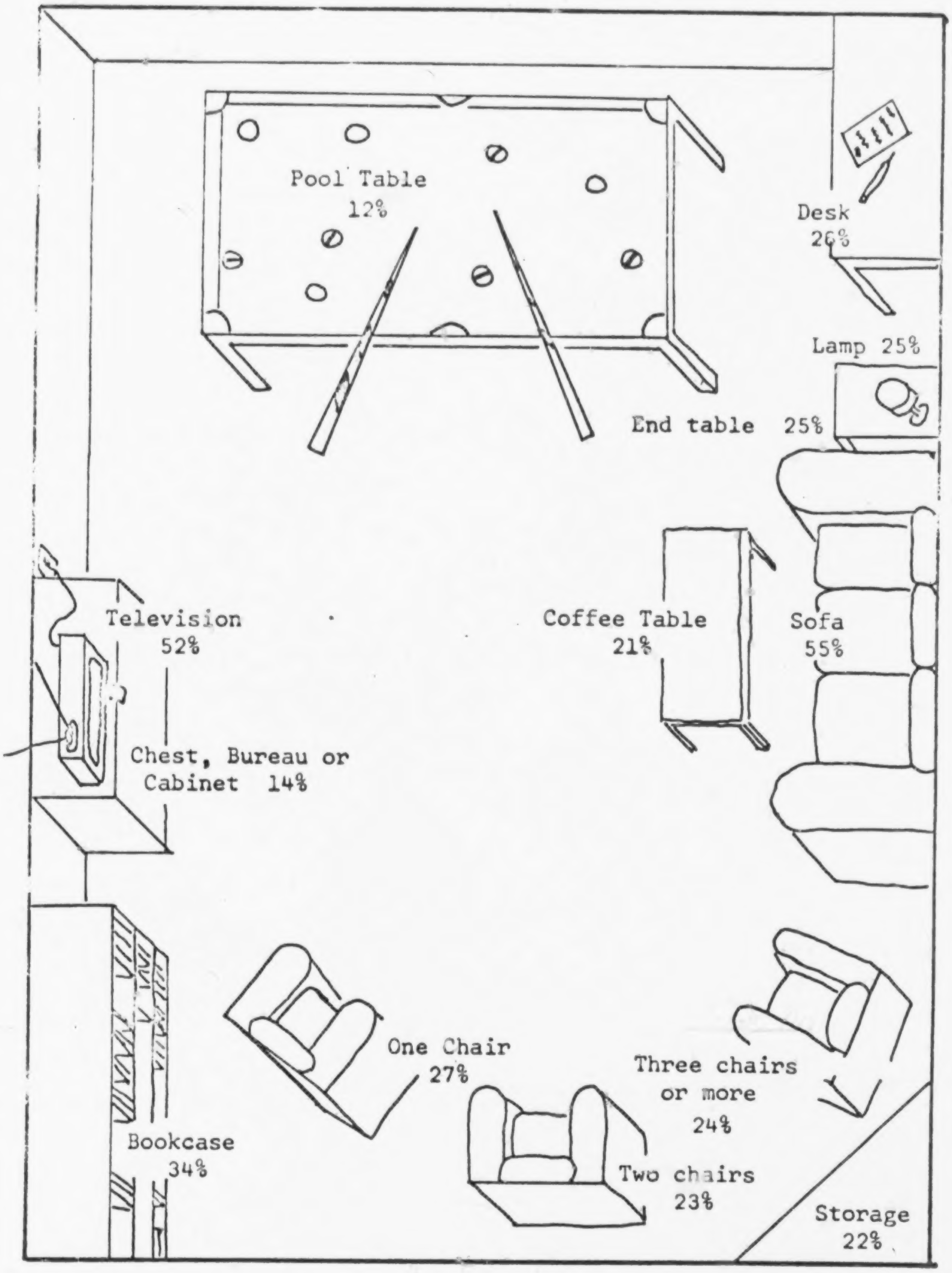

Two lamps 40%
Sofa 74%
Two end tables 41%
Piano 13%
organ 6%
Coffee Table 58%
Stereo or record player 47%
Stool or bench 5%
Desk 9%
Two chairs 49%
Bookcase 34%
Television 64%
Cabinets, chests or bureaus 14%
One chair 12%
Pictures on wall 24%
One other table 35 %
Closet 13%

Figure 9. Schematic diagram of family recreation room


Pool Table
12%
Desk
26%
Lamp 25%
End table 25%
Television
52%
Coffee Table
21%
Sofa
55%
Chest, Bureau or
Cabinet 14%
One Chair
27%
Three chairs
or more
24%
Bookcase
34%
Two chairs
23%
Storage
22%

62% of the homes. These rooms were variable in furnishings, although the basic sofa, coffee table, end table complex was prevalent. One or more sofas appeared frequently (67%), with end tables and lamps less often (25%, 25%). Family and recreation rooms typically had 1-4 or more chairs (74%) and one or more additional tables (43%). Bookcases (34%), desks (26%), sewing machines (4%), fireplaces (10%) and bars (7%) were also differentially present in family rooms. The recreational complex again centered around the TV set (52%). Less frequently occurring were stereo and record players (14%), radios (3%) and pianos or organs (10%). Unique to family rooms were occasionally appearing pool tables (12%) and ping pong tables (1%). Thus, recreation and family rooms seemed to be arranged according to the same basic format as living rooms, with the traditional sofa/end table/coffee table complex and chairs distributed throughout the room. Obviously, there also was a greater occurrence, though not uniformly, of recreational materials.

Bedrooms

Subject's bedroom

As indicated earlier, most homes had either two, three or four bedrooms, one occupied by parents and the others occupied by children. Most Ss did not share their bedroom (62%); the remainder typically shared rooms with a brother (31%). Figures 10 and 11 present schematics of unshared and shared bedrooms.

Insert Figures 10 and 11 about here

Obviously, beds were central features of bedrooms, with one or two single beds in unshared rooms (79%) and two single beds (71%) or a double bed (22%) in shared rooms. Dressers and closets were also prevalent, with one dresser (61%) or two dressers (33%) typical of unshared rooms. In shared rooms there also generally were one (52%) or two dressers (36%). Most rooms, shared or unshared, generally had a single closet (76%, 80%).

Beyond these basic furnishings, there was a tendency for single rooms to have more furniture and appliances than shared rooms (perhaps because of more room and/or smaller family size). For example, unshared rooms more often had a desk compared with shared rooms (58% vs. 34%), had one or more chairs (unshared 64%, shared 44%), bookcases or shelves (48% unshared, 27% shared).

A fair amount of recreational material was also present, equally so in shared and unshared rooms. There were radios (unshared 45%, shared 41%), tape and record players (unshared 44%, shared 36%), TVs (unshared 36%, shared 37%). Thus, it is likely that a considerable amount of recreation involving listening to music or viewing TV took place in the

Figure 10. Schematic diagram of subject's unshared bedroom

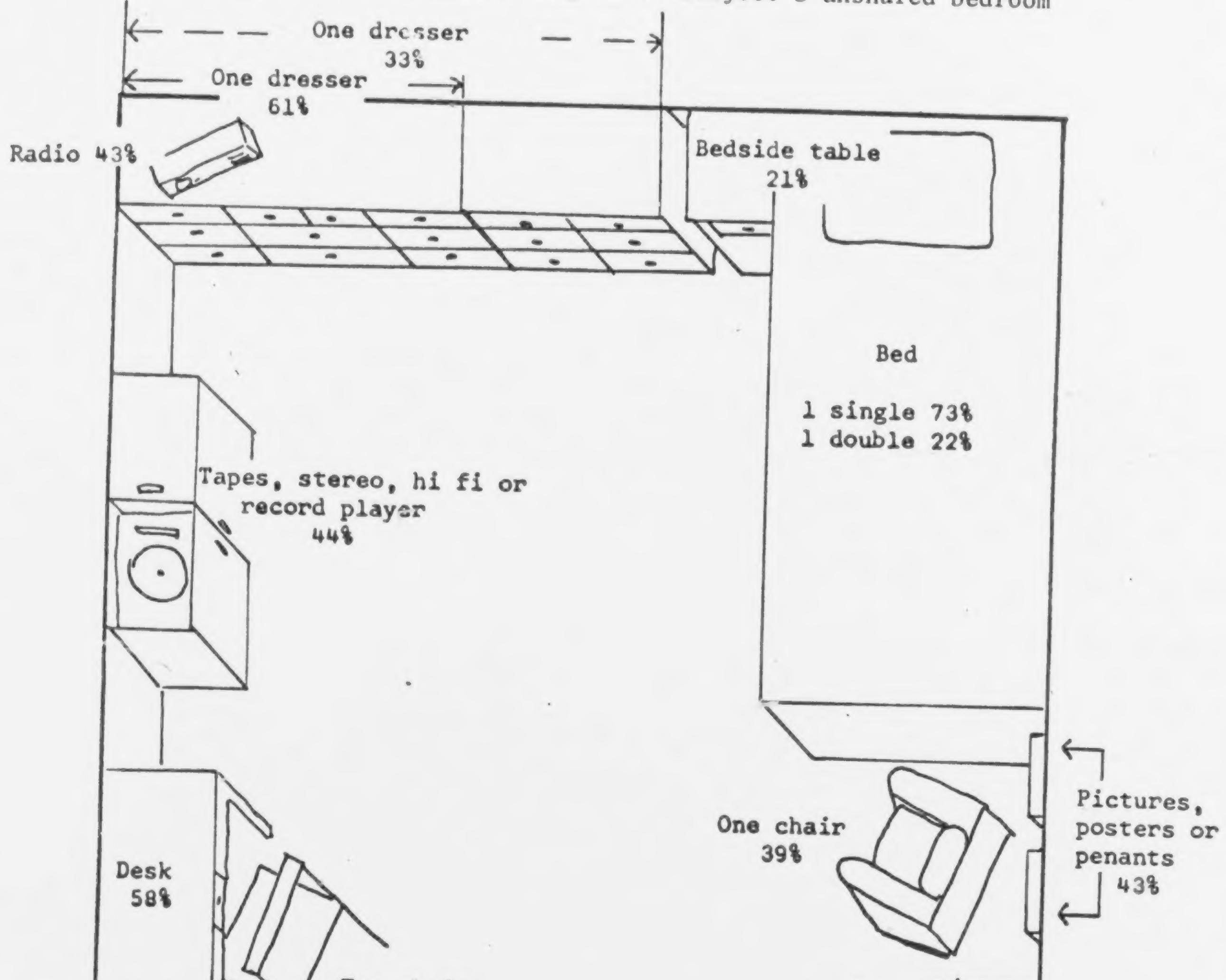
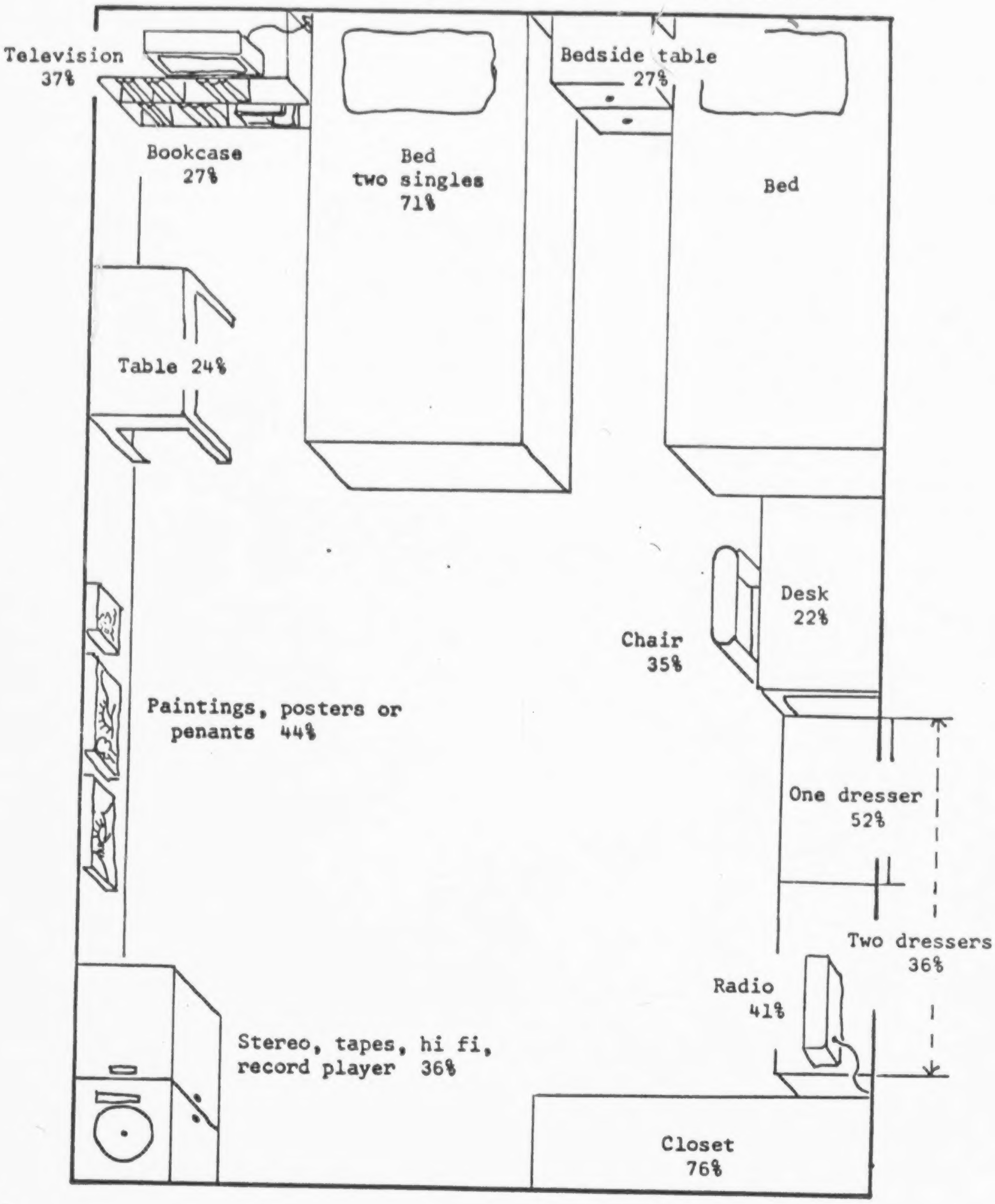

One dresser
33%
One dresser
61%
Radio 43%
Bedside table
21%
Bed
1 single 73%
1 double 22%
Tapes, stereo, hi fi or record player
44%
Pictures, posters or penants
43%
One chair
39%
Desk
58%
Two chairs
21%
Television
36%
Table
20%
Bookcase or shelves
48%
Closet 80%

Figure 11. Schematic diagram of subject's shared bedroom


Television
37%
Bookcase
27%
Bed
two singles
71%
Bedside table
27%
Bed
Table 24%
Desk
22%
Chair
35%
Paintings, posters or
penants 44%
One dresser
52%
Two dressers
36%
Radio
41%
Stereo, tapes, hi fi,
record player 36%
Closet
76%

S's bedroom.

Miscellaneous items appeared in bedrooms with relatively low frequency, and included lamps, storage chests, gun rack cases, telephones, etc. About half the Ss reported various kinds of wall hangings such as pictures, posters and pennants (44% shared, 43% unshared) and mirrors (22% shared, 20% unshared). The accuracy of these wall item data may be suspect since Ss were asked to draw two-dimensional floor plans, and while they were to describe wall hangings and pictures, many may have neglected to do so because of the two-dimensional nature of the task.

It is interesting to note that an increase in number of occupants was not associated with a proportionate increase in facilities and equipment. In fact, in some instances, there was less equipment. While there was slightly more closet space in the shared arrangement, somewhat more dresser space, fewer single desk arrangements and slightly more double desk arrangements, no particular increase in the number of chairs occurred, and there was a decrease in book space, etc. The incidence of TVs was about the same in shared and unshared arrangements, as was the occurrence of radios. However, there were somewhat fewer tape and record players in shared vs. unshared rooms. This might be attributable to economic conditions, since the need to share may have been associated with larger families.

At a more molecular level, of those who shared bedrooms, slightly less than half reported sharing closets (43%) and then in a territorial way about 23% of the time (e.g., the subject and his brother each had a half of the closet). Comparably, only a third of those who shared bureaus and, if they did so, most of those (22%) reported possessing different parts of the bureau. Thus, when sharing occurred, there was territorial use of closets and bureaus for most Ss and their brothers, either with each having separate closets or bureaus, or by separating areas.

Brother's bedroom

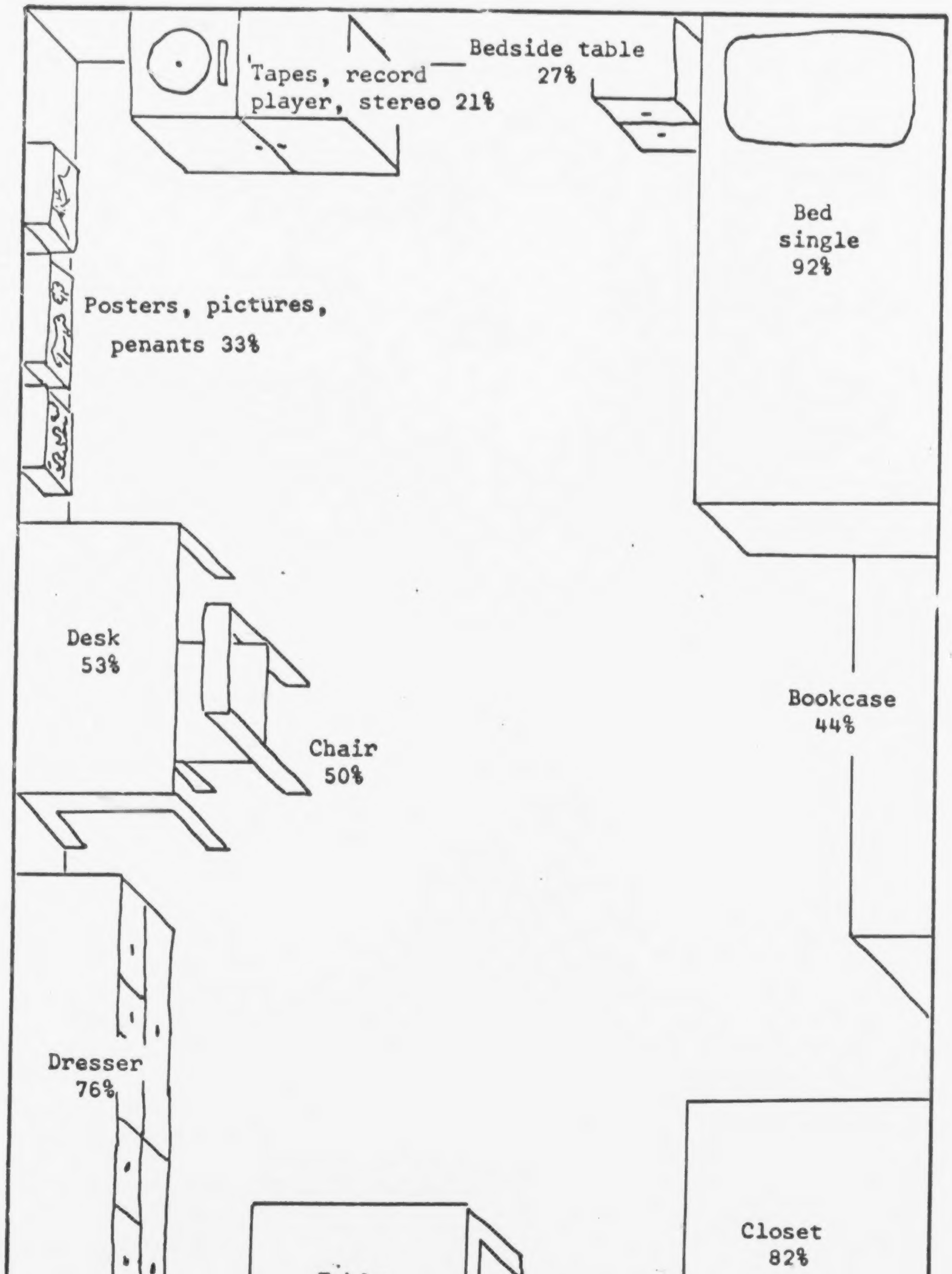
Ss brother's bedroom was furnished in a manner similar to his own (Figure 12). A single bed (92%), a dresser or bureau (76%) and a closet (82%) were present. Also, desks (53%), a chair (50%), and bookcase (44%) appeared at a level equivalent to that of Ss. The S did report less frequent appearance of TVs and tape or stereo equipment in his brother's room (21%), and a somewhat lower occurrence of wall hangings (33%).

Insert Figure 12 about here

Sister's bedroom

Figure 13 presents a schematic of sisters' bedrooms (unshared only).

Figure 12. Schematic diagram of brother's bedroom


Tapes, record player, stereo 21%
Bedside table 27%
Bed single 92%
Posters, pictures, penants 33%
Desk 53%
Chair 50%
Bookcase 44%
Dresser 76%
Table 24%
Closet 82%

Insert Figure 13 about here

There were 58 unshared sister bedrooms and 38 shared bedrooms. Single or double beds prevailed in unshared rooms (98%) and two single beds, one double bed or a double and single bed characterized shared rooms (53%, 25% and 19%). Girls typically had one or two dressers (59%, 38% unshared; 50%, 47% shared), similar to that of brothers. There was also a tendency for sisters to have more storage chests than males (19% and 11% for unshared and shared rooms, respectively). Closets appeared in 71% and 61% of sisters' unshared and shared rooms.

Desks appeared less frequently in sisters' vs. brothers' bedrooms (29% in unshared and 14% in shared sister bedrooms), compared with their appearance in over half the cases of unshared boys' rooms. This may be accounted for by the fact that sisters had other special items, such as vanity dressing tables (unshared 9%, shared 14%), sewing machines (unshared 7%, shared 8%) and even sofas (3%).

Tape and record players were less frequent in sisters' bedrooms than in brothers' bedrooms (34% unshared, 19% shared), as were TVs (10% unshared, 8% shared) and radios (21% unshared, 20% shared). Furthermore, wall decorations appeared less frequently in sisters' bedrooms, with about one-fifth reporting pictures, posters, pennants, etc. (21% unshared, 19% shared) and/or mirrors or other wall hangings (12% unshared, 14% shared).[1]

Parents' bedroom

Figure 14 diagrams parents' bedrooms. Double beds predominated (88%), with a small number having two single beds (10%). Two-thirds of the rooms had two dressers (63%), a smaller number had a single dresser (26%) and a few had three or more dressers (12%). Most rooms had a single closet (64%). Beyond these items, there was a diversity of other furniture and appliances, e.g., one or two bedside tables appeared in almost half the sample (42%), as did one or two chairs (44%). Miscellaneous objects included vanities and dressing tables (10%), lamps (9%), tables (19%), desks (10%), bookcases (10%), sewing machines (12%), pictures (25%) and mirrors and other wall hangings (15%).

Insert Figure 14 about here

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[1] As indicated later, Ss visited sisters' bedrooms less frequently than they visited parents or brothers, and it may be that the data are less reliable for sisters' bedrooms than for the S's own, his brothers', or his parents' bedroom.

Figure 13. Schematic diagram of sister's unshared bedroom

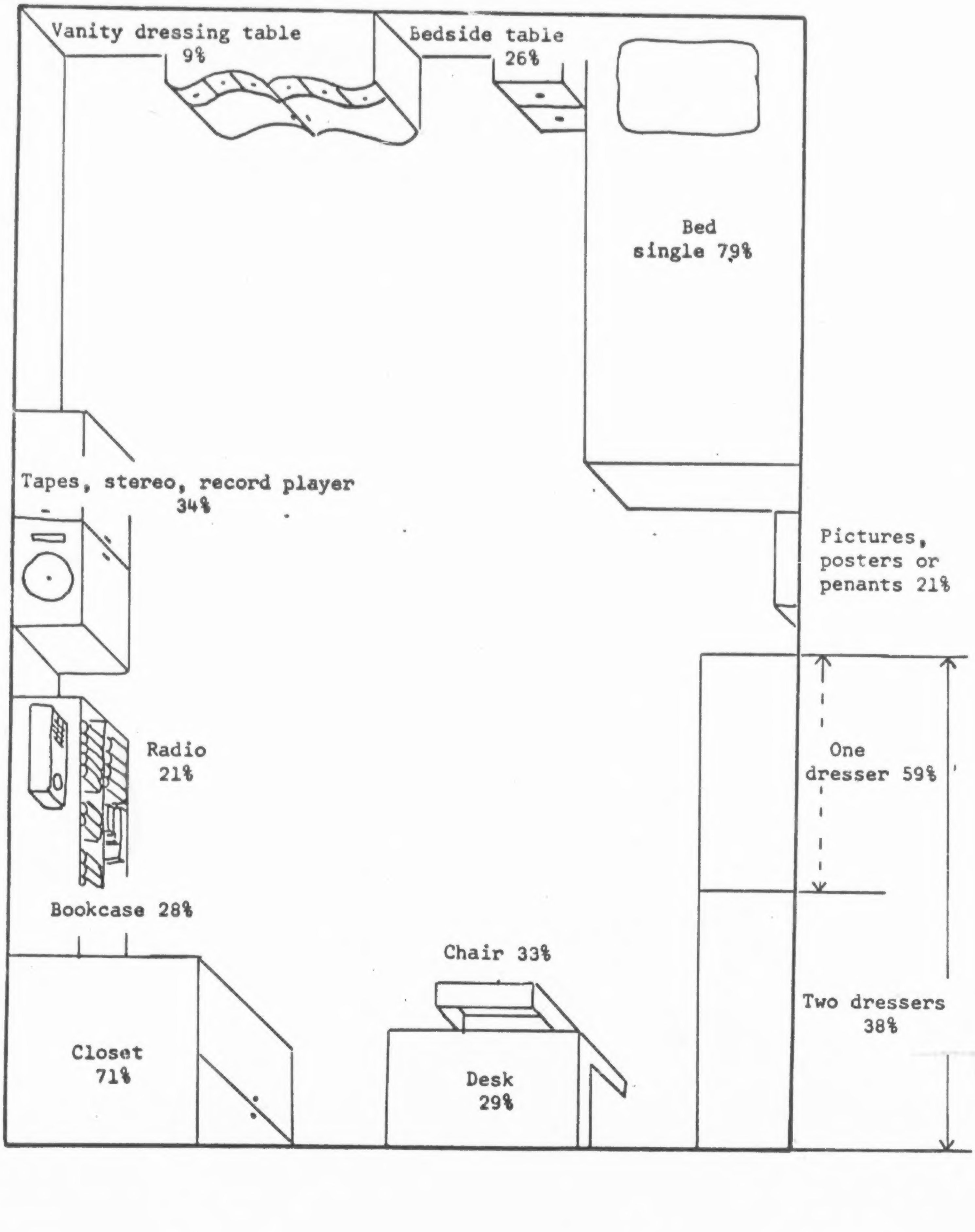
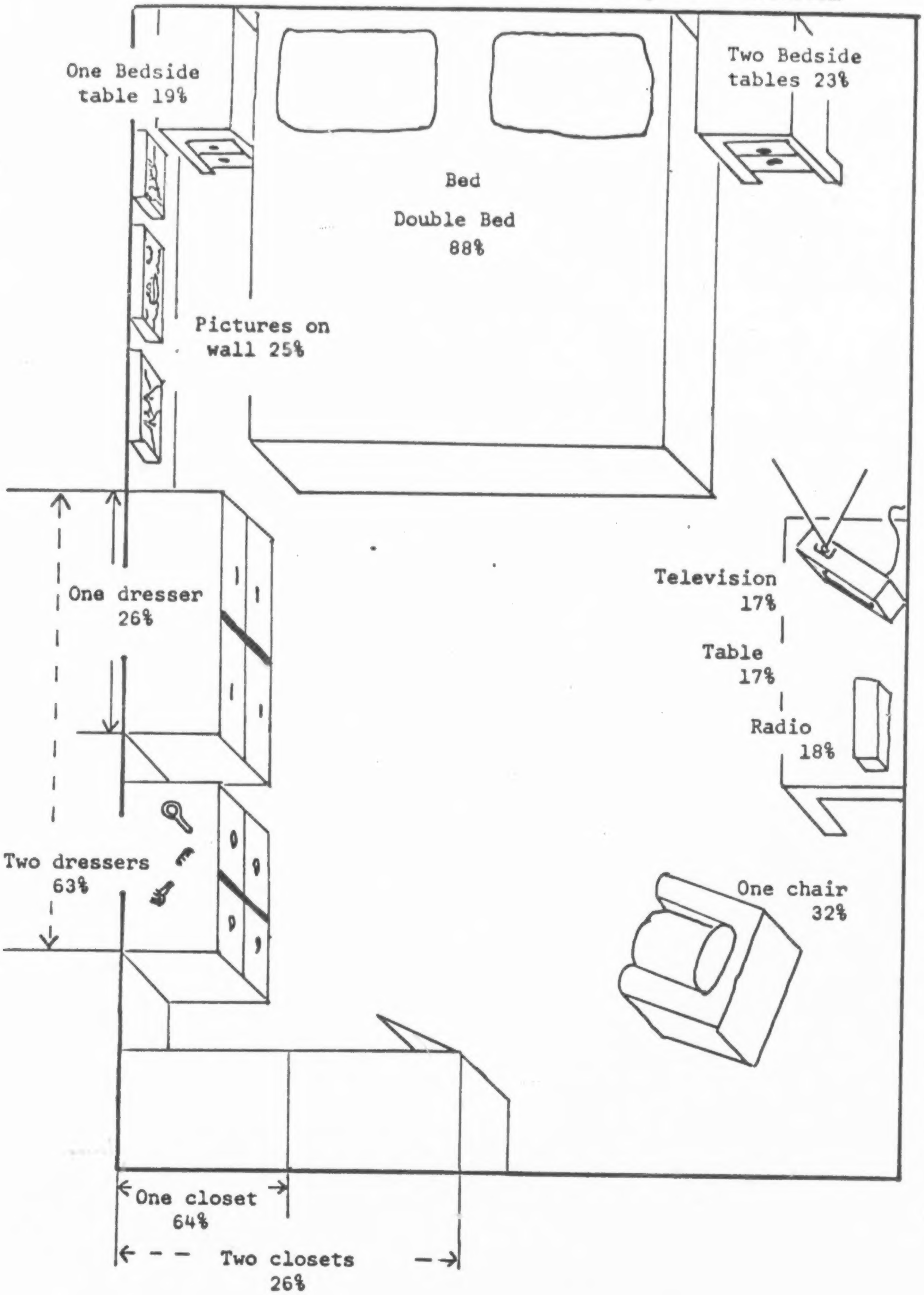

Vanity dressing table
9%
Bedside table
26%
Bed
single 79%
Tapes, stereo, record player
34%
Pictures,
posters or
penants 21%
Radio
21%
One
dresser 59%
Bookcase 28%
Chair 33%
Two dressers
38%
Closet
71%
Desk
29%

Figure 14. Schematic diagram of parents' bedroom


One Bedside table 19%
Two Bedside tables 23%
Bed
Double Bed 88%
Pictures on wall 25%
One dresser 26%
Television 17%
Table 17%
Radio 18%
Two dressers 63%
One chair 32%
One closet 64%
Two closets 26%

Radios and TVs appeared less frequently than for children in the family (18% radios and 17% TVs). Only a small number of parental bedrooms had telephones (5%), again attesting to the middle and lower middle class nature of the sample.

Family Bedroom Practices: Privacy, Social Contact

Doors open or closed

1. Subject's bedroom doors. In addition to sleeping, S's bedrooms were used for recreation (71%), studying (67%) and entertaining friends (63%), and therefore was central to a variety of his activities.

About half of the Ss typically left their bedroom door open when they were inside the room (42%) and a higher number left the door open when they were not in the bedroom (73%) (Figure 15). A smaller proportion either never shut their door (14%) or never left it open (34%). However, there was considerable variation in activities for which bedroom doors were left either open or closed. Doors were not as often open for sleeping (open 36%, shut 55%) or studying (open 22%, shut 55%) or when entertaining friends (open 23%, shut 33%), presumably to cut down on noise as well as to maintain privacy. For recreation, about a third of the sample reported consistently leaving their doors open and a third reported shutting their doors (35%, 33%, respectively).

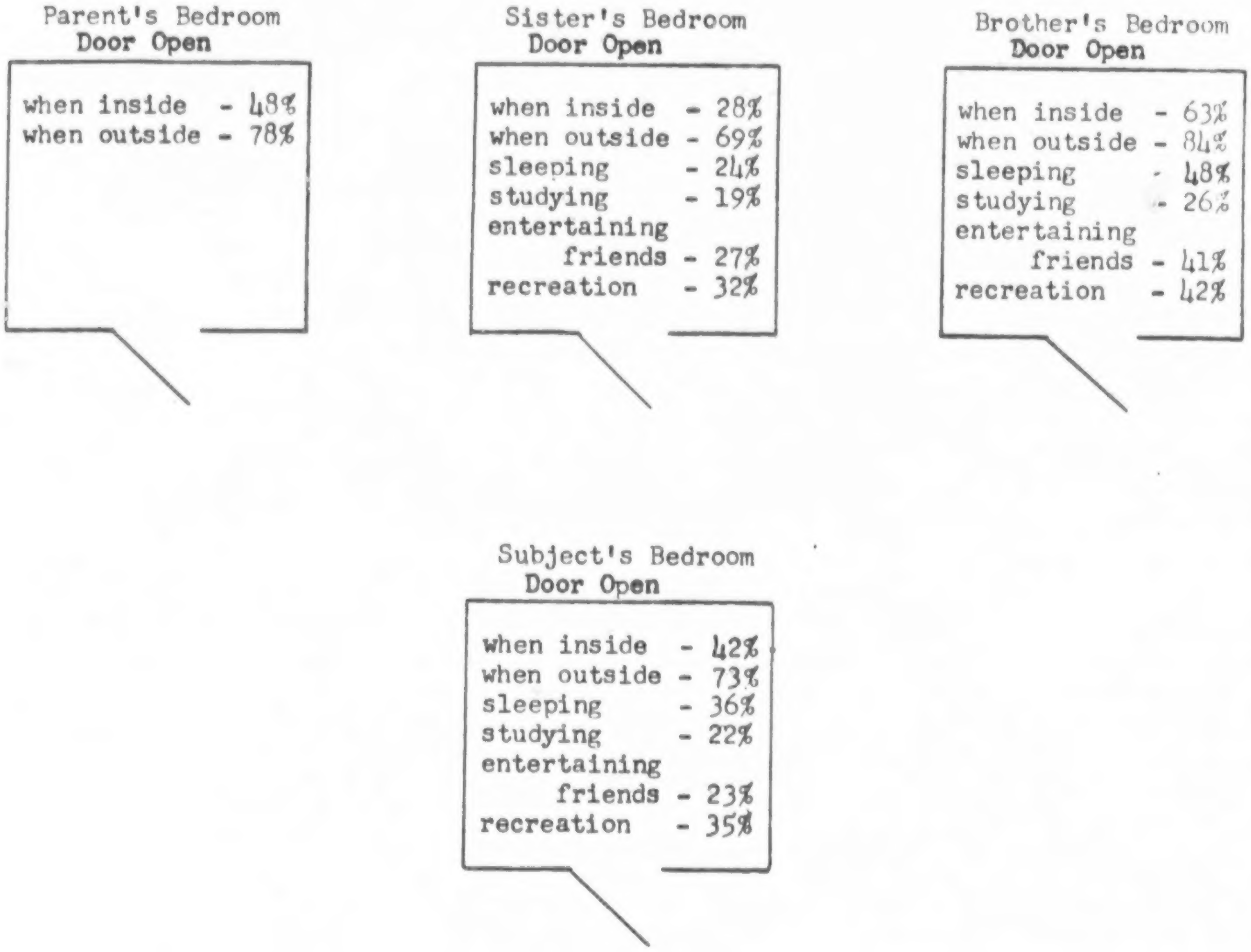
Insert Figure 15 about here

2. Brother's bedroom doors. Ss reported that their brothers kept their bedroom doors open to a somewhat greater extent than they did (when in the bedroom 63%, when out of the bedroom 84%). Furthermore, brothers kept doors open more often than Ss for sleeping (open 48%, shut 46%), studying (open 26%, shut 44%), recreation (open 42%, shut 28%) and entertaining friends (open 41%, shut 27%). Brothers, therefore, were reported to have made their bedrooms more accessible than Ss.

3. Sister's bedroom doors. Ss reported that their sisters' bedrooms were less open than theirs or their brothers (open 28% when inside and 69% when outside the bedroom). They also tended to keep their doors closed to a greater extent than boys in the family for a variety of activities, e.g., sleeping (open 24%, shut 64%), studying (open 19%, shut 58%), recreation (open 32%, shut 46%), entertaining friends (open 27%, shut 54%). Thus, girls used their bedrooms in a more private way than boys.

4. Parents' bedroom doors. Ss reported parents as leaving their bedroom door open when in the room and when out of the room at about the same level as they themselves (48% open when inside, 79% open when outside).

Figure 15. Family member practices regarding keeping their bedroom door open or closed



Parent's Bedroom
Door Open

when inside - 48%
when outside - 78%

Sister's Bedroom
Door Open

when inside - 28%
when outside - 69%
sleeping - 24%
studying - 19%
entertaining friends - 27%
recreation - 32%

Brother's Bedroom
Door Open

when inside - 63%
when outside - 84%
sleeping - 48%
studying - 26%
entertaining friends - 41%
recreation - 42%

Subject's Bedroom
Door Open

when inside - 42%
when outside - 73%
sleeping - 36%
studying - 22%
entertaining friends - 23%
recreation - 35%

Knocking on bedroom doors

To get some idea of boundary crossing in families, information was gathered about knocking on closed bedroom doors (Figure 16). Ss reported that about a third of everyone in the family knocked on their bedroom door when it was closed (32%), almost another third stated that various combinations of specific family members knocked on their door (27%) and another third indicated that no one in the family knocked on their door when it was closed (32%). When asked to indicate who knocked on brothers' and sisters' rooms, there were a fairly substantial number of "don't know" responses. From these data, however, there was the suggestion that everyone tended to knock on sisters' doors to a reasonable extent (38%), with a very small percentage of no one knocking on sisters' doors (8%) or on brothers' doors (1%).

Insert Figure 16 about here

The data also suggest that everyone typically knocked on the parents' bedroom door when it was closed (76%), with relatively few families in which no one knocked on the parents' door (12%). Thus, there appears to be a relative hierarchy of whose door gets knocked on, with parental bedrooms being most respected, followed by sisters and then by boys. The brothers' and sisters' bedroom door situation is uncertain because of the large number of "don't know" responses.

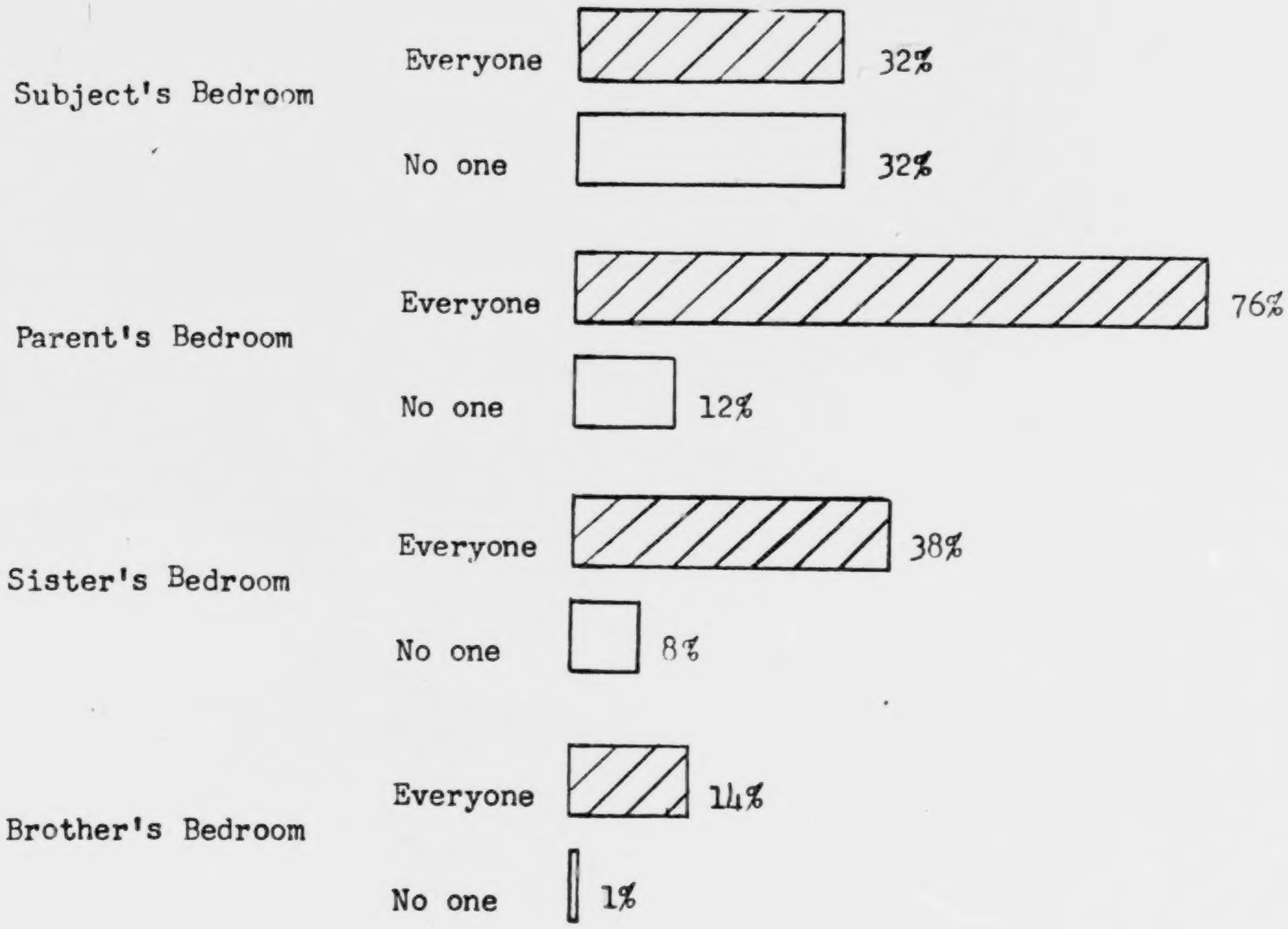
Visiting other family members in their bedrooms

Ss reported visiting other family members' bedrooms as a common practice: with parents (97%), with brothers (98%), with sisters (90%). But frequency of visiting varied with family members. Two-thirds of the Ss reported visiting brothers daily (65%), but less than half reported visiting parents (42%) or sisters on a daily basis (38%).

Reasons for visiting others' bedrooms were relatively consistent and included conversation or borrowing and returning items. (For conversation: parents 76%, brothers 84%, sisters 83%; for borrowing/returning items: parents 75%, brothers 72%, sisters 78%.) As might be expected, studying, reading, watching TV or listening to music were less frequent reasons for visiting others. Thus, there was a substantial flow between family member bedrooms, although it tended to be higher among Ss and their brothers vs. Ss and their sisters or parents.

An indirect way of looking at accessibility of bedrooms concerns who cleaned the S's bedroom and who made his bed. About a third of the Ss cleaned their own bedroom (34%) and made their own bed (34%), and about the same number indicated that their mother did these tasks (33%, 33%). In combination or separately, the great preponderance of cleaning and bedmaking was done by the Ss or his mother, or by both in some alternating fashion

Figure 16. Who knocks on closed bedroom doors



(cleaning 84%, bedmaking 75%). Thus, mothers, at least, had considerable access to Ss' rooms.

Subject's attitudes toward his bedroom

Most Ss liked the arrangement of their bedrooms (93%), with the best feature described as objects in the room (21%), privacy (16%), amount of space (12%) and room arrangement (7%), or some combination of the preceding (21%). The least liked feature of rooms was lack of space (27%), followed by lack of privacy (12%), physical features (13%) or objects in the room (13%).

Bathrooms

As indicated previously, most homes in the sample had one or one and one-half (93%) bathrooms, which were typically shared by the whole family (80%). There was no particular policy for order of use of bathrooms, with a first-come first-serve policy operative (95%).

Most Ss reported that they sometimes kept the bathroom door shut and sometimes kept it open when they were using the bathroom (62%), with the remainder indicating that they always closed the door (38%). Knocking on closed bathroom doors was also prevalent, most Ss reporting that almost everyone else knocked on the door when it was closed and they were inside (80%), and that they also knocked when others were in the bathroom (88%).

Doors were shut differentially for various activities and people were also allowed in selectively, depending on what the S was doing. For example, the more intimate the activity, the greater the probability that the bathroom door would be shut, e.g., when using the toilet practically all Ss closed the bathroom door (99%), as they did for showering and bathing (96%). However, for less intimate activities, such as dressing, a smaller number closed the door (77%); for shaving, combing hair, etc., the door was closed relatively infrequently (21%). Similarly, others were allowed into the bathroom while the S was using it according to the same general order, with people allowed in for less intimate activities such as shaving and combing hair (70%), less so for showering and bathing (46%), and least of all when Ss were using the toilet (5%).

In summary, access to bathroom seemed to be a well regulated practice, with knocking a fairly universal procedure, and the door used as a boundary as a function of the intimacy of the activity.

Special Rooms

Many fathers and mothers were reported to have special rooms (fathers 43%, mothers 43%), although there were differences in what was considered to be a father's or a mother's special room. The father's room was a den/study (8%), shop (11%), attic or basement (1%), or some other area in the home (20%). For mothers, a bedroom (19%), den (3%), kitchen (9%) or some other room (12%) was described as her special place.

It is interesting that most of the mothers' special rooms were essentially public or shared areas, e.g., shared with the father (bedroom) or with all members of the family to one extent or another (kitchen), whereas many of those described as special rooms for fathers could be uniquely used by him. Most parents were described as using their special rooms on almost a daily basis (father 78%, mother 89%).

There also were slight differences in availability of places to others. In general, special rooms were accessible to other members of the family when the mother or father was present (father present 80%, mother present 81%), but there was some tendency for the father's room to be less available to others when he was not present (65%), compared with when the mother was not present (74%). In summary, while both parents often had special rooms and used them frequently, the mother's place seemed to be less private and somewhat more available to other members of the family.

Free Time Activities

Several questions focused on free time activities at home (Figure 17). A considerable amount of time was spent watching TV (76%) and

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Insert Figure 17 about here
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listening to music (85%). Moderate amounts of time were spent reading (48%), working on a car (53%), in conversations (43%), or engaged in sports (40%). Considerably less time was spent working in the yard (26%) or around the house (13%).

Figure 18 indicates the location of free time activities. Much free

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Insert Figure 18 about here
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time was spent either in bedrooms or in the living room (bedroom and some other room 43%; living room and some other room 45%; combined bedroom, living room and other rooms, 70%).

Free time was typically not spent alone, with 69% of the Ss indicating that they usually were with someone else. This was distributed among the whole family as a unit (32%), friends and outsiders (12%) and either the whole family or friends (14%). The remaining free time activities were spent with individual members of the family or sub-groups of family members.

A series of questions were also addressed to the matter of free time after dinner (Figure 19). For all members of the family, except mother,

Figure 17. Subjects' free time activities

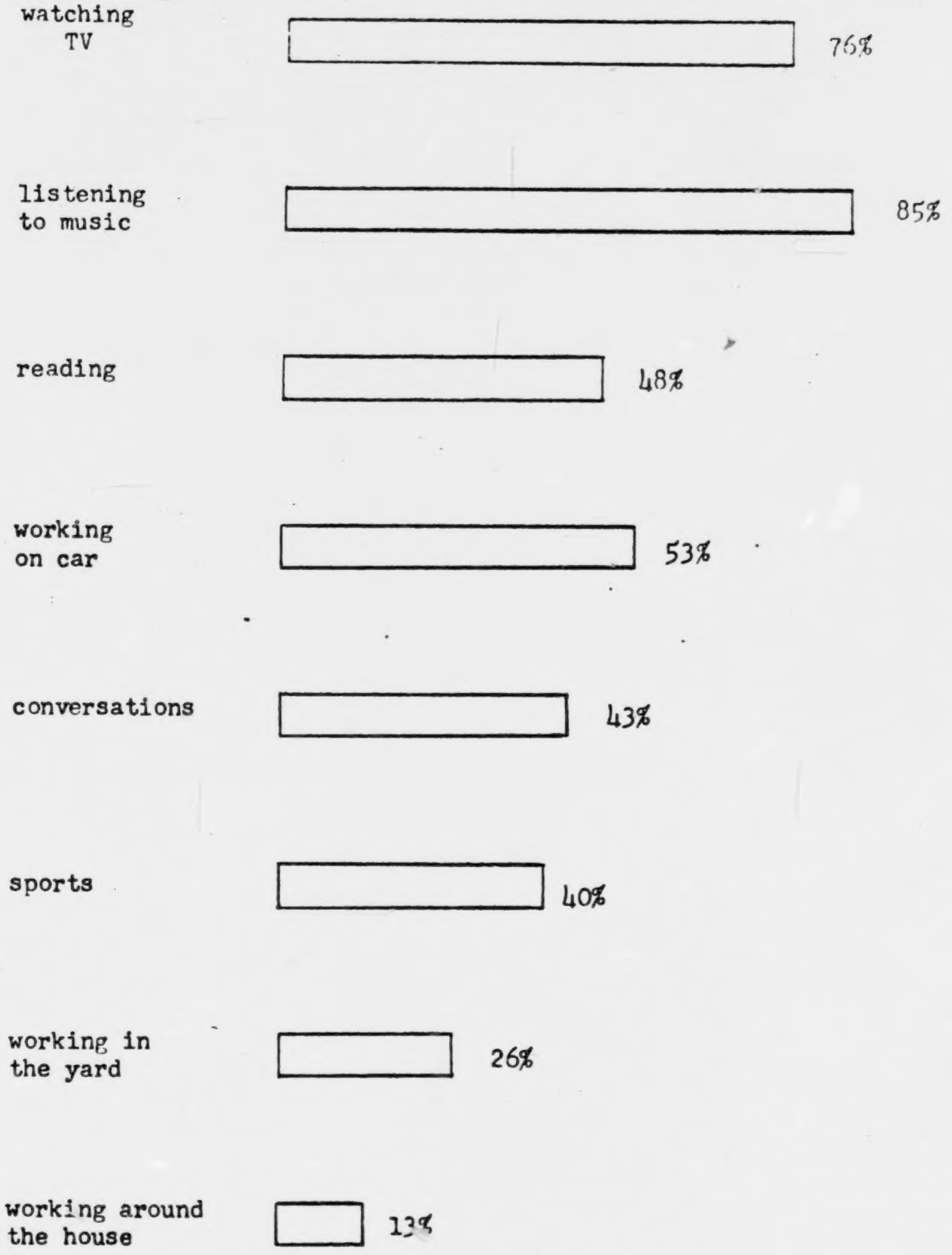
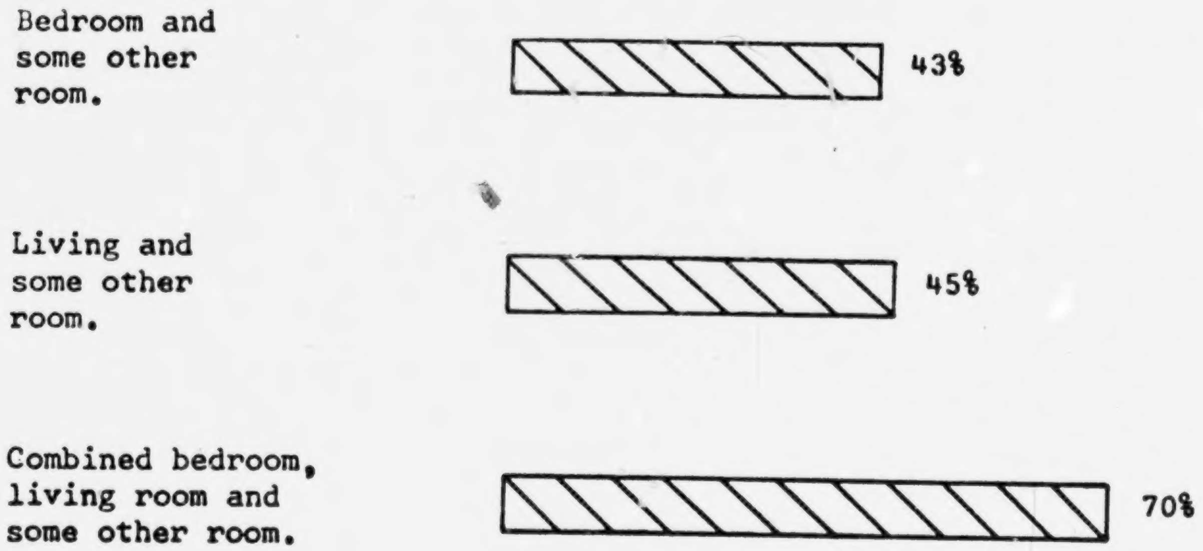


Figure 18. Location of free time activities



Insert Figure 19 about here

TV was a relatively popular after dinner activity. Mothers, on the other hand, appeared to listen to music as their primary post-dinner activity. Unlike others in the family, mothers also spent a considerable amount of time reading. Ss and their brothers spent a fair amount of time engaged in sports and conversation, and listening to music to some extent. Sisters also spent time listening to music, engaging in conversation and reading. In addition to TV, fathers read, engaged in conversation and were very low in listening to music. Thus, the pattern of post-dinner activity was relatively similar among fathers and children, while the mother engaged in more solitary activities.

With regard to location of after-dinner activities, Figure 20 indicates differences among family members. Parents typically went to the living room, family room, den, etc. after dinner (mother 85%, father 82%). Sisters also seemed to spend a moderate amount of time in the living and family room areas, but Ss and their brothers were reasonably prone to leave the house (55%, 27%). The bedroom was not typically used after dinner for activities by anyone in the family, except by the sister (46%).

Insert Figure 20 about here

Thus, following dinner, there seemed to be some fragmentation of the family, with the parents spending time in living room-type areas, as did the sister, and the young male members of the family typically leaving the home or at least spending a fair portion of their time outside. When they did remain home after dinner, time was spent watching TV, listening to music, or engaging in conversation, usually in the living room.

Good and Bad News

In response to questions concerning where good, bad and reprimanding information was conveyed to members of the family and to the S, the data indicated no particular place where good news (84%), bad news (93%) or reprimands to the S (83%) were communicated.

Job Responsibilities and Sharing

There was a tendency for Ss to share tasks around the home vs. having them as their own individual responsibility. Yard work was shared (48% shared, 29% unshared), as was trash responsibility (42% shared, 30% unshared), house maintenance (59% shared, 12% unshared) and care of pets (32% shared, 10% unshared). The two areas in which there was a relatively equal distribution of personal vs. shared responsibility were care of bedrooms (35% shared, 33% unshared) and car repairs and maintenance (31% shared, 31% unshared).

Figure 19. Family members' activities after dinner

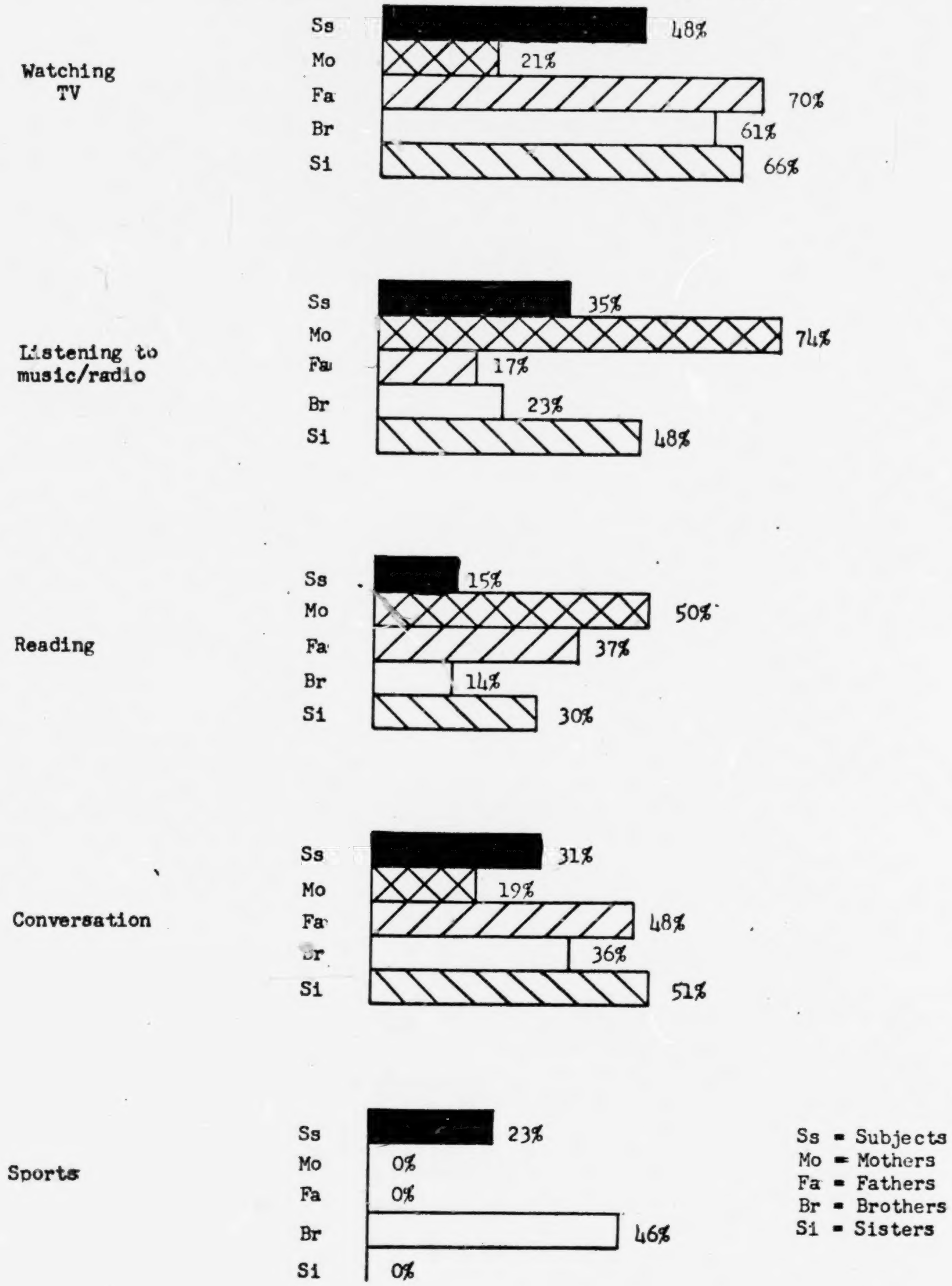
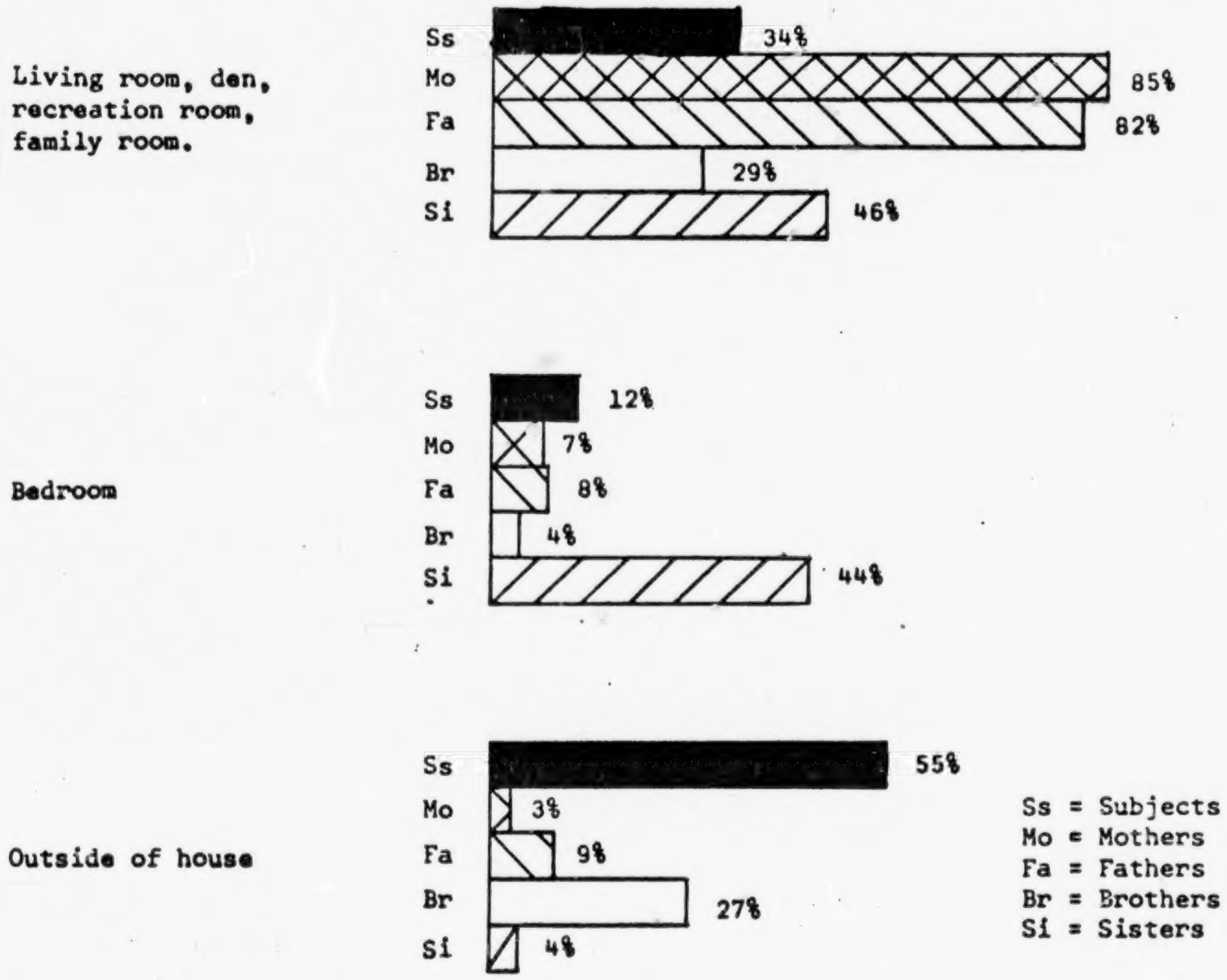


Figure 20. Location of post-dinner recreational activities for family members



V. PATTERNS OF USE OF VARIOUS PARTS OF THE HOME

The preceding section provided a one dimensional, item by item overview of the general ecology of homes in the sample. This level of analysis was designed to uncover some general properties of home usage as well as to indicate areas in which they differed. A second level of analysis, presented in this section, involves two-way comparisons of home properties and usage, and is directed toward understanding relationships between how different parts of the family home are used. The goal is to go beyond sheer description and to begin inducing some general ecological properties of home usage. Specifically, we hope to identify systematic ways in which various parts of the home are used in common and in diverse ways and to move toward a general integrated description of how space, objects and activities mesh together in various parts of the home. To accomplish this, 92 individual questionnaire items were selected for analysis. All items were cross-related with one another to yield a 92 X 92 matrix of relationships. The empirical relationships between items were evaluated by chi-square.

The 92 items were selected because they showed response variations in the original one-way classification. Those with response distributions of 70%: 30% or greater for a single category were generally not included in the analysis. They were considered "universal" and seemed to apply to the great majority of Ss and families in the sample. A pragmatic reason for not including these items was the resulting small N in two-way classification analyses. In a few cases such items were included because of their interest value.

The 92 items fell into nine general categories: (1) biographical properties of Ss and their families, e.g., family size, parental occupation, number of rooms in the house, locations of family home, etc.; (2) eating activities and kitchen/dining room properties, e.g., seating patterns at the table, location of family guests; (3) bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein, e.g., sharing, use of bedrooms for various kinds of activities, bedroom door practices, door knocking behavior; (4) bathrooms; (5) special rooms; (6) living room characteristics and activities; (7) general free time activities, e.g., free time activities which the S and various members of his family participated in; (8) jobs around the house; (9) locale of news dissemination to various members of the family.

Examination of the matrix of relationships between items indicated a number of key items and item clusters in the 92 item sample in terms of their high incidence of statistical association with a large number of other items. In the following sections each cluster and its associated items are described in terms of statistical significance and direction of association.

The following clusters of items seem to fit with one another and with a large number of other items: (1) bedroom use and bedroom door practices, (2) eating, kitchen and dining room related behavior, (3) special rooms, (4) job and facility sharing, (5) family interaction patterns. For each major area or activity in the home, results of interrelationships among items are summarized in terms of a series of "propositions" or statements which capture the main sense of empirical results. Propositional statements from section to section are sometimes redundant, since the data were re-examined several times from the perspective of a particular part of the home or from the perspective of a specific activity.

Use of Bedrooms

This block of items was concerned with use of bedrooms by family members. One subset of items focused on practices regarding leaving bedroom doors open or closed for a variety of activities such as sleeping, recreation, studying, entertaining friends. These items, individually, and in combination, yielded many interrelationships with one another and with other aspects of family use of space. As such, they provide a central focus for much of the ecology of family life. Table 1 summarizes these relationships, which can be grouped into several propositions or hypotheses.[1] Generally, these data suggest that individuals and families manifested generally consistent profiles of either "open or accessible" use of space vs. "closed and inaccessible" use of space.

Insert Table 1 about here

Proposition 1: Individual family members are consistent in openness and accessibility of their bedrooms across a variety of activities.

As the data indicate (Category III, Table 1), if an individual left his bedroom door open for one activity, he typically left it open for many other activities. For example, Ss who left their doors open when they were inside or outside the bedroom also left the door open for sleeping, recreation, studying and entertaining friends. If they tended to close their door for any of these activities, the probability was greater that they would close it for many others. Thus, knowing if a person leaves his bedroom door open for a specific activity is a good indicator of the probability of his so doing for a number of other activities. This characteristic also seemed to hold for others in the family, e.g., parents who left their bedroom door open when they were inside the room also left it open when they were not in the bedroom,

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[1] Table 1 also presents the number of items involved in each set of comparisons, e.g., nine items were concerned with S's bedroom door being open or closed and were related to 7 items regarding biographical properties of Ss, for a total of 63 statistical tests. Of these, only two were significant at the .05 level of confidence.

TABLE 1

Summary of Empirical Relationships between Use of Bedroom Doors and Other Aspects of Family Activity

Subject's bedroom door open (9 items)	Parents' bedroom door open (2 items)	Brother's bedroom door open (7 items)	Sister's bedroom door open (2 items)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)			
Items significant $p<.05=2$ $p<.10=3$ Families lived in more homes, families of higher socio-economic status; Ss had brothers	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=4$ $p<.10=0$ Families lived in larger population areas; more persons per bedroom in the family home	Items significant p-.05=1 p-.10=0 Families of higher socio-economic status.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)			
Items significant $p<.05=8$ $p<.10=3$ Families ate together more; families and Ss guests ate in the kitchen.	Items significant $p<.05=2$ $p<.10=1$ Families ate together more; families and Ss guests ate in the kitchen.	Items significant $p<.05=3$ $p<.10=1$ Families and Ss guests ate in the kitchen; the dining room was not used for anything other than eating.	Items significant $p<.05=0$ $p<.10=1$ Mother sat at end or center of table and father sat at end
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)			
Items significant $p<.05=90$ $p<.10=17$ Ss shared bedroom and bedroom closet; Ss studied (one exception) and entertained friends in bedroom; S's bedroom door open when inside and outside; for activities, sleeping, recreation, studying; everyone walked into S's bedroom without knocking; Ss made their own beds; not enough privacy was the least liked bedroom feature; parents' bedroom	Items significant $p<.05=12$ $p<.10=5$ Ss bedroom door open when not inside; for sleeping, recreation; everyone walked into Ss bedroom without knocking; mother made S's bed; parents' bedroom door open when inside and outside; brother's bedroom door open when outside; brother's bedroom door shut for recreation; sister's bedroom door open when inside and outside; Ss went into parents' bedroom everyday and	Items significant $p<.05=44$ $p<.10=2$ Ss did not study in bedroom; S's bedroom door open when inside and outside, for activities, sleeping, studying, recreation (one exception); everyone walked into S's bedroom without knocking; mother cleaned S's bedroom; parents' bedroom door open when outside, shut when inside; brother's bedroom door open when inside, sleeping, entertaining friends, recreation,	Items significant $p<.05=11$ $p<.10=2$ S's bedroom door open when inside and outside, for recreation; mother made S's bed and cleaned S's bedroom; parents' bedroom door open when outside; brother's bedroom door shut when sleeping; sister's bedroom door open when inside and outside; Ss went into parents' bedroom everyday and into brother's bedroom a couple of days per week.

Table 1, cont.

Subject's bedroom door open	Parents' bedroom door open	Brother's bedroom door open	Sister's bedroom door open
door open when inside and outside; brother's bedroom door open when inside, for recreation, sleeping, studying, sister's bedroom door open when inside and outside; Ss went into parents' bedroom everyday and into brother's bedroom a couple of days per week.	into brother's bedroom a couple of days per week.	studying; sister's bedroom door shut when inside.	
CATEGORY IV Bathrooms (1 item)			
Items significant $p<.05=1$ $p<.10=1$ Ss sometimes left the bathroom door open, sometimes shut (one exception).	Items significant $p<.05=1$ $p<.10=1$ Ss sometimes left the bathroom door open, sometimes shut.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$
CATEGORY V Special rooms (5 items)			
Items significant $p<.05=3$ $p<.10=2$ Others felt free to use S's and father's special rooms when they were not there; father generally did not have a special room.	Items significant $p<.05=0$ $p<.10=1$ Others did not feel free to use S's special room when Ss not there.	Items significant $p<.05=2$ $p<.10=1$ Others did not feel free to use father's special room when he was not there; mother had a special room.	Items significant $p<.05=0$ $p<.10=2$ Others felt free to use S's special room; mother had a special room.
CATEGORY VI Living room characteristics and activities (3 items)			
Items significant $p<.05=1$ $p<.10=1$ Ss listened to music in the living room.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Ss did not play games in the living room.

Table 1, cont.

Subject's bedroom door open	Parents' bedroom door open	Brother's bedroom door open	Sister's bedroom door open
CATEGORY VII General free time activities (21 items)			
Items significant $p<.05=14$ $p<.10=15$ S's free time activities included watching TV, conversation/phoning, sports (one exception), spending time with others; on weekends Ss engaged in family conversations; after dinner Ss watched TV, did not listen to music/radio; fathers engaged in conversation, did not read; brothers engaged in conversation, watched TV; sisters engaged in conversation (one exception), listened to music/radio (one exception).	Items significant $p<.05=2$ $p<.10=2$ During free time Ss did not read or work on the car; mother did not read after dinner; father did not engage in conversation.	Items significant $p<.05=10$ $p<.10=4$ S's free time activities included watching TV, conversation/phoning, spending time with others; Ss did not engage in sports or work on car; after dinner Ss watched TV, engaged in conversation; mother read; father engaged in conversation, did not read; brothers watched TV, engaged in sports; sisters listened to music/radio	Items significant $p<.05=1$ $p<.10=1$ On weekends Ss engaged in family conversation; after dinner the sisters listened to music/radio.
CATEGORY VIII Jobs around the house (10 items)			
Items significant $p<.05=5$ $p<.10=3$ Ss did not have strict responsibility for lawn/yard work; Ss shared lawn/yard work, trash or garbage duties, they did not share car repairs or maintenance.	Items significant $p<.05=3$ $p<.10=1$ Ss did not have strict responsibility for lawn/yard work, trash or garbage duties; Ss shared trash or garbage duties, they did not share care of pets.	Items significant $p<.05=2$ $p<.10=1$ Ss did not have strict responsibility for car repairs or maintenance; Ss did not share trash or garbage duties, they did share house maintenance.	Items significant $p<.05=2$ $p<.10=2$ Ss did not have strict responsibility for bedroom care, car repairs or maintenance; Ss shared trash/garbage duties and car repairs or maintenance.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)			
Items significant $p<.05=0$ $p<.10=3$ Good news was told to everyone at once or to whomever was present.	Items significant $p<.05=1$ $p<.10=0$ Good news was told to everyone at once or to whomever was present.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

as did sisters and brothers. Thus, within individual family members' bedrooms, there was consistent use of bedroom doors, either keeping them closed for a variety of activities or leaving them open.

Proposition 2: Family members are similar to one another in openness and accessibility of bedrooms.

As reflected in the figure and tables (Category III, Table 1), family members exhibited general consistency with one another in keeping bedroom doors open or closed. In general, if the S kept his bedroom door open, then most other members of the family also did so. This was particularly true for parents and sisters, but was slightly less characteristic of brothers.

Based on these two propositions, a picture of this one facet of family ecology emerges. Not only did individual members of the family open or close their bedroom doors for a variety of activities in a consistent fashion, but there seemed to be a fairly general pattern of family openness/accessibility, at least with regard to this one behavioral use of the environment. Thus, one set of families apparently kept bedroom doors closed and another type of family typically kept doors open, with fairly widespread communality in either practice within and among family members.

Proposition 3: Openness/accessibility of bedroom doors is associated with greater informality of family life.

This proposition is supported by several items. For example, there was a general tendency for families who kept their bedroom doors open to eat more often in the kitchen vs. the dining room and for Ss' guests to be entertained in the kitchen (Category IV). In addition, in families where bedroom doors were kept open there was less tendency to knock on doors before entering a room. Also, bathroom doors were left open more often. Thus, open use of bedrooms--leaving doors open--was associated with less formal use of other areas.

Proposition 4: Openness/accessibility of bedroom doors is associated with overlapping role responsibilities among family members.

Openness of bedroom doors was somewhat related to the degree to which children and others in the family shared various jobs (Category VIII). The data suggest (with some exceptions) that families with open bedrooms typically had children sharing jobs around the house, including garden work, trash, cleaning and making up bedrooms, repair and maintenance of cars, etc. Thus, spatial openness was related to activity sharing.

Proposition 5: Openness/accessibility of bedroom doors is associated with family social interaction and sharing.

Ss from families who maintained open bedroom doors visited their parents' bedrooms often, engaged frequently in family activities involving conversation, games, TV watching, etc., and the family ate meals together more often. In addition, another group of items suggests that sharing in one aspect of family life was associated with sharing in other aspects. For example, if the S or others had open bedroom doors, there was a tendency for people to feel free to use other persons' special rooms (although not always consistently), to have a fair amount of family conversation during free time, to visit parents and others' bedrooms frequently, and for good news to be told to whomever happened to be around at the time, or to everyone at once.

The data indicate, for brothers' bedroom doors only, a potentially important factor associated with openness--family density, or the ratio of people:rooms. In general, the more people per room in the home, the greater the openness of brothers' bedroom doors. Although the data are quite meager, a large family may well be one primary antecedent of open use of space, either because of the necessity for sharing space and/or because there is an inability of individuals in large families to control access of others into their space. Other correlates of open doors were higher socioeconomic status, families having lived in more homes and in more densely populated geographical regions of the country.

Summary

These data point to use of bedroom doors as key indicators of family ecology. Open (or closed) doors to bedrooms are consistent among family members, as well as for various activities within a family member's bedroom. Open doors also go along with increased informality in the family, overlapping of roles and responsibilities, sharing of facilities and jobs, increased family interaction and a general free flow of people among areas and across objects. In open families physical boundaries between people seem less prevalent, the family members come together often, overlap and deal with one another to a greater extent and in a more physically fluid environment. In general, these data confirm the idea that family functioning occurs within a total environment, seems to be a balanced ecological system involving behavioral, resource and facility consistency, and permeates several levels of functioning--verbal exchange, task performance, eating, sleeping, etc.

Use of the Kitchen

Several family practices concerning the kitchen were consistently related to use of space in other parts of the home. The kitchen, like the bedroom, seems to be a focal point of family activity and reflects a great deal of the ecology of family life.

As indicated earlier, families were evenly divided between where they had dinner, i.e., 48% in the kitchen and 44% in the dining room. Several general propositions center around the location of family and S guest dinner meals (see Table 2).

Insert Table 2 about here

Proposition 6: When families and guests eat in the kitchen, there is more informality, openness/accessibility throughout the home.

A cluster of other room practices, particularly with regard to doors being open or closed, were associated with eating in the kitchen. When families and S's guests ate in the kitchen, family members also kept their bedroom doors open in general, and for a variety of activities, such as recreation, sleeping, etc. Although of marginal significance, bathroom doors also were left open more by kitchen eaters. In addition, there was greater accessibility among those who ate dinner in the kitchen, to the special rooms of others in the family. An indirect indicator of accessibility concerns who cleaned the S's bedroom. Families where kitchen eating was the practice seemed to have mother participating in cleaning the S's bedroom to a greater extent than those who ate in the dining room.

With regard to informality, families who ate in the kitchen used the kitchen and the dining room for multiple purposes beyond eating (e.g., recreation and entertainment). Those who ate in dining rooms reserved it solely for eating, and there may have been more compartmentalization and formalization of usage of space in general. In addition, when families ate in the kitchen, guests of the S ate in the kitchen, again reflecting potentially greater family informality. Therefore, a variety of behaviors, space usages and practices were associated with family and guests eating in the kitchen and seemed to reflect greater spatial and interpersonal openness and informality. (It should be noted that this proposition overlaps somewhat with Proposition 3).

There was a rather unclear set of relationships derived from a cluster of items concerned with post-dinner activities. The data seem to suggest that families who ate in the kitchen exhibited sometimes more and sometimes less social interaction, but not in a consistent direction.

Proposition 7: Specific parental seating patterns at mealtime (father at end of table, mother at end or center) are associated with family openness/accessibility and job sharing.

Earlier it was indicated that most families had fixed seats at the table at mealtimes, with fathers typically at the head or end of the table and mothers at the other end or at the father's adjacent corner. When mothers sat at the opposite end of the table to the father (or at the center of the table) vs. at the father's adjacent corner, there was a greater incidence of accessibility to the parental bedroom, e.g., Ss visited or entered their parents' bedroom often, on an everyday basis. Those families where the mother sat at the father's adjacent corner exhibited less openness and accessibility to parental bedrooms. In

TABLE 2

Summary of Empirical Relationships between Use of the Kitchen and Other Aspects of Family Activity

Family eating together frequently (1 item)	Family and S's guests ate dinner in the kitchen (2 items)	Mother sat at the end or center of the table and father sat at the end (1 item)	The kitchen was used for something other than cooking and eating (1 item)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Families lived in more homes.	Items significant $p<.05=2$ $p<.10=1$ Ss did not have sisters. Fewer persons per room and per bedroom.	Items significant $p<.05=0$ $p<.10=0$
CATEGORY II Eating activities and kitchen/dining room properties (6 items)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=4$ $p<.10=0$ Family and S's guests ate in kitchen; kitchen was used for something other than cooking and eating.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=3$ $p<.10=0$ Family ate dinner in the kitchen; S's guests ate in the kitchen; dining room used for something other than eating.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)			
Items significant $p<.05=2$ $p<.10=3$ S's bedroom door open when inside and outside and when sleeping; parents' bedroom door open when outside; Ss went into sister's bedroom everyday.	Items significant $p<.05=14$ $p<.10= 5$ S's bedroom door open when inside, for activities, sleeping, recreation; S's mother cleaned S's bedroom and made S's bed; lot of space best feature of S's bedroom and not enough privacy least liked feature; parents' bedroom door open when inside; brother's bedroom door open when sleeping; no one walked into	Items significant $p<.05=0$ $p<.10=2$ Sister's bedroom door open when not inside; Ss went into parents' bedroom everyday.	Items significant $p<.05=4$ $p<.10=0$ S's bedroom door open for activities, recreation; brother's bedroom door open while entertaining friends and for recreation.

Table 2, cont.

Family eating together frequently	Family and S's guests ate dinner in the kitchen	Mother sat at the end or center of the table and father sat at the end	The kitchen was used for something other than cooking and eating
	brother's bedroom without knocking.		
CATEGORY IV Bathrooms (1 item)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=1$ Ss left the bathroom door sometimes open, sometimes shut.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=1$ Ss left the bathroom door sometimes open, sometimes shut.
CATEGORY V Special rooms (5 items)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=5$ $p<.10=0$ Others felt free to use S's and father's special rooms when they were not there; mother did not have a special room.	Items significant $p<.05=0$ $p<.10=1$ Father had a special room.	Items significant $p<.05=0$ $p<.10=1$ Others felt free to use S's special room when he was there.
CATEGORY VI Living room characteristics and activities (3 items)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=2$ $p<.10=0$ Ss did not play games in the living room.	Items significant $p<.05=0$ $p<.10=1$ Ss did not play games in the living room.	Items significant $p<.05=1$ $p<.10=1$ Ss watched TV in the living room.
CATEGORY VII General free time activities (21 items)			
Items significant $p<.05=2$ $p<.10=0$ Ss engaged in family conversations on weekends; sisters	Items significant $p<.05=5$ $p<.10=2$ Ss did not listen to music at home on weekends; fathers	Items significant $p<.05=2$ $p<.10=2$ During free time Ss did not engage in conversation; on	Items significant $p<.05=1$ $p<.10=0$ During free time Ss read.

Table 2, cont.

Family eating together frequently	Family and S's guests ate dinner in the kitchen	Mother sat at the end or center of the table and father sat at the end	The kitchen was used for something other than cooking and eating
engaged in conversation after dinner.	did not read or engage in conversation after dinner; brothers did not engage in sports after dinner.	weekends Ss did not watch TV; after dinner when the dishes were done, brothers did not engage in sports and sisters did not engage in conversation.	
CATEGORY VIII Jobs around the house (10 items)			
Items significant $p<.05=1$ $p<.10=0$ Ss shared house maintenance.	Items significant $p<.05=0$ $p<.10=1$ Ss did not have strict responsibility for bedroom care.	Items significant $p<.05=0$ $p<.10=1$ Ss shared trash and garbage duties with others.	Items significant $p<.05=0$ $p<.10=1$ Ss shared bedroom care.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=1$ Good news was told to everyone at the same time or to whomever happened to be around at the time.

addition, parental end-to-end/center table seating also was associated with greater incidence of a sister's bedroom door being open and the bathroom door being open when in use. This parental seating pattern also went along with sharing of jobs around the house, rather than individual assignments to particular chores. However, the end-end or end-center seating pattern was associated with less recreation in the home.

It should be noted that parental end-end or end-center seating occurred more in low density homes, i.e., where there was a lower people:room ratio, suggesting perhaps that in roomy quarters parental seating encompassed the whole family at dinnertime, whereas more densely populated homes had parents nearer one another at dinnertime, perhaps to facilitate their dyadic interaction.

It may be that end-to-end/center seating pattern functions to include physically, visually, and verbally the whole family in activities and conversation, almost by necessity, since parents are probably central in conversations and must, therefore, speak to one another and to the whole family simultaneously. Furthermore, this arrangement may facilitate parental control over eating activities since they can verbally, physically, and visually attend to everyone more readily, also resulting in enhanced interaction between family members. In the adjacent end-to-corner arrangement, it is likely that considerable conversation and interaction occurs between parents alone, with children on the fringe or engaged in independent interaction with one another.

Proposition 8: Use of the kitchen for meals and other activities is associated with job sharing.

Although the relationships were only marginal, families who used the kitchen for meals and other purposes and who ate together frequently also had children who shared various chores and jobs around the house, again suggesting that openness/informality of space use fits with interaction and overlap in a variety of activities.

In summary, there was a consistent relationship between use of the kitchen for meals and the tendency of family members to leave their bedroom doors open for a variety of purposes. This pattern of kitchen use was also related to accessibility to others' special rooms, availability of the S's room to his mother for cleaning, etc. There was also some indication that bathroom usage was more open for those who ate in the kitchen.

A second factor associated with use of the kitchen is less formality of family functioning. One might argue that many of the so-called "accessibility/openness" items involve less formal relationships between family members, i.e., they can visit one another, have ready access to one another's private areas, etc. This was also indicated in the fact that those who ate in kitchens had guests who ate in the kitchen (presumably in a less formal setting).

Use of Bathrooms

As described earlier, the bathroom is not only one of the more private areas of the home, but is used differentially for various activities. A substantial number of Ss kept the bathroom door shut at all times, with the remainder indicating that they sometimes kept the door open and sometimes shut. Also, the more intimate the activity, the greater the tendency for the bathroom door to be closed and the fewer the people allowed in during its use. The bathroom door as a barrier was also generally respected by others, with knocking a typical family practice when the door was closed.

In general, use of the bathroom door fits with earlier propositions, i.e., openness/accessibility, family formality/informality, and sharing of responsibilities (Table 3).

Insert Table 3 about here

Proposition 9: Openness of bathroom doors is associated with openness/accessibility of bedrooms and family informality.

This proposition, though based on a limited number of cases, derives from data indicating that Ss who kept the bathroom door open also left their bedroom doors open for activities such as sleeping and recreation, as did their parents. Furthermore, those who left bathroom doors open also reported that their family ate meals in the kitchen and the kitchen was used for a variety of purposes other than eating. There was also a tendency for high family density (persons per room) and absence of female siblings to be associated with keeping the bathroom door open. In summary, how the bathroom was used, particularly with regard to whether the door was open or closed, fits with many prior items and overlaps with the earlier propositions of informality and openness of family functioning.

Special Rooms

Ss completed a block of questions about "special rooms" they or their parents had in various parts of the home. In general, S's bedroom was considered to be his special room, and slightly less than half of the mothers and fathers were reported to have had a special room. For fathers, these included dens/studies, shops, attics, basements, or other rooms. Mothers seemed to have special rooms which were generally available and public for at least one other member of the family, e.g., the parental bedroom or the kitchen. Most Ss also indicated that parents' special rooms were readily available to other members of the family when the owner was present and still quite available, though less so, when the owner was absent. Although these properties of special rooms were fairly widespread, we also conducted cross-cut analyses of ownership and availability of special room with other items.

TABLE 3

Summary of Empirical Relationships between Use of Bathroom Doors and Other Aspects of Family Activity

Ss sometimes left the bathroom door open, sometimes shut (1 item)	Ss always shut the bathroom door (1 item)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)	
Items significant $p<.05=1$ $p<.10=1$	Items significant $p<.05=1$ $p<.10=0$
Ss did not have sisters; more persons per room in home.	Ss had sisters; fewer persons per room in home.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)	
Items significant $p<.05=1$ $p<.10=2$	Items significant $p<.05=1$ $p<.10=2$
Family ate dinner in the kitchen; mother sat at the end or center of the table, father sat at the end; kitchen used for something other than cooking and eating.	Family ate dinner in the dining room; mother sat at the corner of the table, father sat at the end; kitchen not used for anything other than cooking and eating.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)	
Items significant $p<.05=2$ $p<.10=3$	Items significant $p<.05=2$ $p<.10=3$
Ss bedroom door open for activities, sleeping; S's bedroom door shut for recreation; parents' bedroom door open when inside and outside.	S's bedroom door shut for activities, sleeping; S's bedroom door open for recreation; parents' bedroom door shut when inside and outside.
CATEGORY IV Bathrooms (1 item)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$
CATEGORY V Special rooms (5 items)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

Table 3, cont.

Ss sometimes left the bathroom door open, sometimes shut	Ss always shut the bathroom door
CATEGORY VI Living room characteristics and activities (3 items)	
Items significant $p < .05=0$ $p < .10=0$	Items significant $p < .05=0$ $p < .10=0$
CATEGORY VII General free time activities (21 items)	
Items significant $p < .05=0$ $p < .10=0$	Items significant $p < .05=0$ $p < .10=0$
CATEGORY VIII Jobs around the house (10 items)	
Items significant $p < .05=0$ $p < .10=2$ Ss did not have strict responsibility for car repairs or maintenance; did not share care of pets.	Items significant $p < .05=0$ $p < .10=2$ Ss did not have strict responsibility for car repairs or maintenance; did share care of pets.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)	
Items significant $p < .05=0$ $p < .10=0$	Items significant $p < .05=0$ $p < .10=0$

Proposition 10: The father's possession of a special room is associated with greater family formality and lessened accessibility among family members.

The data are not wholly clear with regard to the relationship between parental ownership of special rooms and other family activities and use of space (Table 4). However, when the father possessed a special room, there seemed to be less openness/accessibility, informality and family interaction. This is evidenced by the fact that S's bedroom door tended to be closed when the father had a special room, there was little job sharing, the dining room was used largely for eating, rather than multiple functions, etc. Furthermore, there were fewer people per bedroom when the father had a special room, suggesting a larger home or fewer members per family and greater availability of space. But, these sets of relationships are based on only a small number of significant results.

Insert Table 4 about here

When mother possessed a special room, there seemed to be greater family openness/availability, informality, and sharing of responsibilities. Brothers and sisters' bedroom doors were reported to be open, there was some job sharing, the family engaged in more activities of a joint nature, although they did not eat in the kitchen.

Proposition 11: The greater the availability of special rooms to others, the greater the family openness/accessibility, informality, sharing and social interaction.

Ss who reported that their own special rooms (usually their bedroom) was available to others also tended to be more open in use of their bedroom and had more access to others' bedrooms. For example, they used their bedrooms for entertaining, typically left the bedroom door open when they were away, and reported little knocking by others on their bedroom door. They also indicated daily visits to their parents' and sisters' bedrooms, their sister kept her bedroom door open, and that there was little knocking on their brother's bedroom door when it was closed. Furthermore, those who made their special rooms available to others did so when they were present or absent. The only inconsistent result was that parents tended to keep their bedroom door closed.

Thus, the availability of special rooms to others was generally associated with greater overall accessibility of the S and his space to others. A similar pattern held for fathers. When fathers made their rooms available, Ss tended to keep their doors open for entertaining, sleeping and in general, as did brothers; there also was less knocking on brothers' doors. Piecing these results together suggests general family accessibility/openness to be associated with the availability of

TABLE 4

Summary of Empirical Relationships between Making "Special Rooms" Available to Others and Other Aspects of Family Activity

Others felt free to use S's special room when he was there and when he was not there (2 items)	Father had a special room (1 item)	Others felt free to use father's special room when he was not there (1 item)	Mother had a special room (1 item)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)			
Items significant $p<.05=1$ $p<.10=2$ Higher socioeconomic status; family lived in fewer homes; more persons per room.	Items significant $p<.05=1$ $p<.10=0$ Fewer persons per bedroom in the home.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=1$ Ss did not have brothers; fewer persons per room in home.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)			
Items significant $p<.05=2$ $p<.10=1$ Family and S's guests ate in the kitchen; kitchen used for something other than cooking and eating.	Items significant $p<.05=0$ $p<.10=2$ Mother sat at the end or center of the table, father sat at the end; dining room not used for anything other than eating.	Items significant $p<.05=3$ $p<.10=0$ Family and S's guests ate in the kitchen; dining room used for something other than eating.	Items significant $p<.05=1$ $p<.10=0$ Family ate dinner in the dining room.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)			
Items significant $p<.05=5$ $p<.10=4$ S's bedroom door open when not inside; Ss entertained friends in bedroom; no one knocked before going into S's bedroom; everyone went into S's bedroom without knocking; parents' bedroom door shut when not inside; everyone walked into brother's bedroom without knocking;	Items significant $p<.05=1$ $p<.10=1$ S's bedroom door shut when not inside; lot of space best feature of S's bedroom.	Items significant $p<.05=5$ $p<.10=1$ S's bedroom door open when inside, for sleeping, entertaining friends; brother's bedroom door open when entertaining friends; brother's bedroom door shut for recreation; everyone walked into brother's bedroom without knocking.	Items significant $p<.05=1$ $p<.10=1$ Ss entertained friends in bedroom; brother's bedroom door open while entertaining friends; sister's bedroom door open when inside.

Table 4, cont.

Others felt free to use S's special room when he was there and when he was not there	Father had a special room	Others felt free to use father's special room when he was not there	Mother had a special room
sister's bedroom door open when not inside; Ss went into parents' bedroom everyday; Ss went into sister's bedroom everyday.			
CATEGORY IV Bathrooms (1 item)			
Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 0$ $p < .10 = 0$
CATEGORY V Special rooms (5 items)			
Items significant $p < .05 = 3$ $p < .10 = 0$ Others felt free to use S's special room when he was not there and when he was there; others felt free to use father's special room when he was not there.	Items significant $p < .05 = 1$ $p < .10 = 0$ Mother had a special room.	Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 1$ $p < .10 = 0$ Father had a special room.
CATEGORY VI Living room characteristics and activities (3 items)			
Items significant $p < .05 = 1$ $p < .10 = 1$ Ss listened to music in living room; did not watch TV.	Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 0$ $p < .10 = 0$	Items significant $p < .05 = 0$ $p < .10 = 2$ Ss listened to music and played games in the living room.

Table 4, cont.

Others felt free to use S's special room when he was there and when he was not there	Father had a special room	Others felt free to use father's special room when he was not there	Mother had a special room
CATEGORY VII General free time activities (21 items)			
Items significant $p<.05=4$ $p<.10=1$	Items significant $p<.05=2$ $p<.10=1$	Items significant $p<.05=1$ $p<.10=0$	Items significant $p<.05=2$ $p<.10=1$
Ss spent free time with others; watched TV on weekends; did not watch TV after dinner; brothers engaged in conversation after dinner.	During free time Ss did not read; did not watch TV on weekends; sisters did not watch TV after dinner.	Father did not read after dinner.	S's fathers, and brothers engaged in conversation after dinner.
CATEGORY VIII Jobs around the house (10 items)			
Items significant $p<.05=6$ $p<.10=2$	Items significant $p<.05=2$ $p<.10=1$	Items significant $p<.05=0$ $p<.10=1$	Items significant $p<.05=0$ $p<.10=1$
Ss did not have strict responsibility for lawn or yard work; shared lawn or yard work, trash or garbage duties, house maintenance, and care of pets.	Ss had strict responsibility for lawn or yard work; did not share trash/garbage duties or house maintenance.	Ss did not have strict responsibility for lawn or yard work.	Ss shared house maintenance.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

member's special rooms to others.

Second, the greater the availability of special rooms to other family members, the greater the tendency for family members to engage in interaction with one another, via conversations, visits and general social exchange. They also reported sharing various jobs around the house, such as maintenance of the family car, care of the lawn, maintenance of the home, trash responsibilities, etc. Finally, there seemed to be more informality when special rooms were accessible, with families eating in the kitchen, having their guests eat in the kitchen and using the kitchen for a multiplicity of purposes.

In summary, there was a general trend for special rooms to exist for various family members when there was a lower density of people in the home and to be associated with greater family formality. However, when there were special rooms, the greater the availability of these rooms to other members of the family, the greater the openness/accessibility, informality, interaction and overlapping of job responsibilities among family members.

Recreation Activities

Proposition 12: Activities involving high family social interaction are associated with openness/accessibility and job sharing.

This proposition, somewhat redundant with Proposition 5, concerns relationships between a variety of leisure time activities such as conversations with family members, watching TV, reading, listening to music, working on cars and sports, and environmental and social behaviors tapped by the questionnaire (Table 5). The most social and people-oriented activity was family conversation, and the data indicate that this was positively related to bedroom doors being open, sharing of jobs around the home, eating frequently together as a family, and sharing of news with everyone. Watching TV, perhaps also a social-public activity, was associated with openness of bedroom doors, ease of access to others' special rooms, and sharing of home chores. Those who reported engaging in more solitary leisure time activities, e.g., reading and perhaps car maintenance, or those engaging in activities with other than family members, e.g., sports, kept their bedroom doors closed and reported less access to others' rooms.

Insert Table 5 about here

Household Jobs

A number of items pertained to sharing of household jobs by Ss and other family members. Jobs involved indoor tasks (bedroom care and care of pets), outdoor chores (trash/garbage and lawn/yard work), and

TABLE 5

Summary of Empirical Relationships Between Recreation Activities and Other Aspects of Family Activity

Conversation (6 items)	Watching TV (5 items)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)	
Items significant $p<.05=0$ $p<.10=2$	Items significant $p<.05=4$ $p<.10=1$
There were fewer persons per bedroom and per room.	Families lived in fewer homes; in smaller population areas; Ss had sisters but did not have brothers.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)	
Items significant $p<.05=5$ $p<.10=2$	Items significant $p<.05=2$ $p<.10=0$
The family ate together frequently; family and S's guests ate in the dining room; mother sat at the corner of the table, father at the end; dining room used for something other than eating.	Mother sat at the corner of the table and father sat at the end; dining room used for something other than eating.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)	
Items significant $p<.05=9$ $p<.10=14$	Items significant $p<.05=6$ $p<.10=9$
Ss used bedroom to entertain friends; S's bedroom door open when inside, for activities, sleeping, recreation, entertaining friends; Ss made own bed; no one entered S's bedroom without knocking (one exception); brother's bedroom door open when inside, sleeping, studying; sister's bedroom door open when inside.	Ss entertained friends in bedroom; S's bedroom door open when inside, for activities, sleeping and entertaining friends; brother's bedroom door open for entertaining friends and studying; Ss cleaned own bedroom and made own bed; Ss shared bedroom with someone else; Ss went into brother's bedroom everyday.
CATEGORY IV Bathrooms (1 item)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

Table 5, cont.

Conversation	Watching TV
CATEGORY V Special rooms (5 items)	
Items significant $p<.05=1$ $p<.10=1$ Mother had a special room.	Items significant $p<.05=3$ $p<.10=1$ Others felt free to use S's special room when he was there; father did not have a special room.
CATEGORY VI Living room characteristics and activities (3 items)	
Items significant $p<.05=1$ $p<.10=1$ Ss played games in the living room.	Items significant $p<.05=1$ $p<.10=2$ Ss listened to music in the living room (one exception), and also played games.
CATEGORY VII General free time activities (21 items)	
Items significant $p<.05=70$ $p<.10=12$ During free time Ss watched TV, read, worked on the car, engaged in sports, spent time with others, engaged in conversation/phoning; on weekends or to celebrate special occasions Ss engaged in conversation, watched TV, listened to music; after dinner Ss engaged in conversation, listened to music/radio, watched TV; mother read; father read, engaged in conversation; brother engaged in conversation, sports, watched TV; sister engaged in conversation, listened to music/radio, watched TV.	Items significant $p<.05=44$ $p<.10=19$ During free time Ss watched TV, read, engaged in conversation/phoning; spent time with others and worked on the car; on weekends or for special occasions Ss engaged in family conversation, watched TV and listened to music; after dinner Ss engaged in conversation, listened to music/radio and watched TV; mother read; father engaged in conversation; brother engaged in conversation, watched TV but did not engage in sports; and sister engaged in conversation, listened to music/radio and watched TV.
CATEGORY VIII Jobs around the house (10 items)	
Items significant $p<.05=4$ $p<.10=5$ Ss did not have strict responsibility for car repairs/maintenance, lawn or yard work; shared trash/garbage duties, care of bedroom, care of pets, house maintenance.	Items significant $p<.05=1$ $p<.10=2$ Ss did not have strict responsibility for car repairs or maintenance; shared bedroom care and house maintenance.

Table 5, cont.

Conversation	Watching TV
CATEGORY IX Locale of news dissemination to various members of the family (1 item)	
Items significant $p<.05=1$ $p<.10=1$	Items significant $p<.05=0$ $p<.10=0$
Good news told to everyone at once or to whomever happened to be around at the time.	

Table 5, cont.

Reading (3 items)	Listening to music (3 items)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)	
Items significant $p<.05=1$ $p<.10=0$ There are fewer persons per bedroom.	Items significant $p<.05=1$ $p<.10=1$ Families of higher socioeconomic status; fewer persons per bedroom.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)	
Items significant $p<.05=4$ $p<.10=1$ Family and S's guests ate in the dining room; kitchen used for something other than cooking and eating; dining room used for something other than eating (one exception).	Items significant $p<.05=1$ $p<.10=1$ Family and S's guests ate in the dining room.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)	
Items significant $p<.05=7$ $p<.10=6$ Ss studied and entertained friends in bedroom; S's bedroom door shut for activities, studying, and recreation; parents' bedroom door shut when outside; brother's bedroom door open while studying; shut while sleeping; no one knocked before entering S's bedroom; privacy best feature of S's bedroom; not enough space the worst feature; Ss went into brother's bedroom everyday.	Items significant $p<.05=2$ $p<.10=4$ S's bedroom door open when outside; shut when entertaining friends; no one entered S's bedroom without knocking first; brother's bedroom door open when outside; sister's bedroom door open when inside.
CATEGORY IV Bathrooms (1 item)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

Table 5, cont.

Reading	Listening to music
CATEGORY V Special rooms (5 items)	
Items significant $p<.05=1$ $p<.10=1$ Others did not feel free to use father's special room when he was not there; father did not have a special room.	Items significant $p<.05=0$ $p<.10=0$
CATEGORY VI Living room characteristics and activities (3 items)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Ss listened to music in the living room.
CATEGORY VII General free time activities (21 items)	
Items significant $p<.05=20$ $p<.10=6$ During free time Ss watched TV, engaged in conversation/phoning, and sports; on the weekends or on special occasions Ss engaged in family conversation (one exception), watched TV, and listened to music/radio; after dinner Ss engaged in conversation, listened to music/radio, and watched TV; father engaged in conversation; brother engaged in conversation and watched TV; sister engaged in conversation and watched TV.	Items significant $p<.05=22$ $p<.10=6$ During free time Ss watched TV and engaged in conversation; on the weekends or on special occasions Ss engaged in family conversation, watched TV, and listened to music; after dinner Ss engaged in conversation, listened to music/radio, watched TV; mother read; father read; brother engaged in conversation, sports, watched TV; sister engaged in conversation and listened to music/radio.
CATEGORY VIII Jobs around the house (10 items)	
Items significant $p<.05=4$ $p<.10=2$ Ss did not have strict responsibility for bedroom care (one exception); they shared lawn/yard duties, trash/garbage duties; bedroom care and house maintenance.	Items significant $p<.05=1$ $p<.10=3$ Ss did not have strict responsibility for car repairs or maintenance; shared trash/garbage duties, lawn/yard work, and house maintenance.

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Table 5, cont.

Reading	Listening to music
CATEGORY IX Locale of news dissemination to various members of the family (1 item)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Good news told to mother first.

Table 5, cont.

Ss and brothers engaging in sports (2 items)	Spending time with others (1 item)	Working on the car (1 item)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)		
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Ss had sisters.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)		
Items significant $p<.05=1$ $p<.10=1$ Mother sat at corner of table, father at end; S's guests ate in dining room.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)		
Items significant $p<.05=7$ $p<.10=2$ Ss shared bedroom closet; shut bedroom door when not inside; open for activities; Ss cleaned own bedroom and made own bed; not enough space least liked feature of bedroom; brother's bedroom door shut when outside (one exception); Ss visited sister's bedroom a couple of days per week.	Items significant $p<.05=3$ $p<.10=0$ S's bedroom door open when outside; open for activities; brother's bedroom door open while studying.	Items significant $p<.05=1$ $p<.10=2$ Ss made their own beds; parents' bedroom door shut when outside; brother's bedroom door shut when entertaining friends.
CATEGORY IV Bathrooms (1 item)		
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$
CATEGORY V Special rooms (5 items)		
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=2$ $p<.10=0$ Others felt free to use S's special room when he was there and when he was not there.	Items significant $p<.05=0$ $p<.10=0$

Table 5, cont.

Ss and brothers engaging in sports	Spending time with others	Working on the car
CATEGORY VI Living room characteristics and activities (3 items)		
Items significant $p<.05=1$ $p<.10=0$ Ss listened to music in the living room.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=1$ Ss played games in the living room.
CATEGORY VII General free time activities (21 items)		
Items significant $p<.05=7$ $p<.10=3$ During free time Ss engaged in conversation/phoning and spent time with others; after dinner Ss engaged in conversation; mother read; father engaged in conversation; brother engaged in conversation but did not watch TV; sister engaged in conversation and listened to music/radio.	Items significant $p<.05=5$ $p<.10=2$ During free time Ss engaged in conversation/phoning and sports; after dinner Ss watched TV; father engaged in conversation; brother engaged in conversation and watched TV; sister engaged in conversation.	Items significant $p<.05=3$ $p<.10=1$ During free time Ss wathced TV and engaged in conversation; after dinner sister engaged in conversation and watched TV.
CATEGORY VIII Jobs around the house (10 items)		
Items significant $p<.05=2$ $p<.10=1$ Ss had strict responsibility for trash/garbage duties (one exception); they shared lawn/yard work.	Items significant $p<.05=1$ $p<.10=2$ Ss shared lawn/yard duties, bedroom care and house maintenance.	Items significant $p<.05=2$ $p<.10=1$ Ss had strict responsibility for trash/garbage duties and car repairs/maintenance; they shared bedroom care.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)		
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

maintenance jobs (Table 6). Many of the item intercorrelations have

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Insert Table 6 about here
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been described earlier in connection with other propositions. The following proposition seems to convey the role of job sharing in the home environment.

Proposition 13: Sharing home jobs is associated with family informality, openness/accessibility and enhanced family interaction.

With regard to informality, families who ate together in the kitchen and who used the dining room and kitchen for a variety of activities exhibited higher frequency of job sharing among children. However, the fact that sharing also occurred in families with a higher ratio of persons:rooms may account for the informality and multiple use of space. Sharing jobs also went along with openness/accessibility, i.e., family members left their bedroom doors open, used the bedrooms for a number of activities, visited one another's bedrooms often, and many people walked in without knocking. The special room of one of the family members was also available to others. This typical open door policy was maintained even though Ss objected to their lack of privacy. Again, sharing and openness may be linked to the population density of the home. Finally, there appeared to be some evidence that such sharing was associated with heightened family interaction.

News Transmittal

The data leading to the following proposition were based on only a single questionnaire item, which often yielded only marginally significant results (Table 7). Nevertheless, the pattern of data seemed

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Insert Table 7 about here
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sufficiently consistent and in accord with prior propositions to suggest a general conclusion.

Proposition 14: Initial transmittal of good news by the father to all family members vs. to the mother is associated with greater family openness/accessibility, social interaction, informality and job sharing.

With regard to openness/accessibility, the data suggest that where bedroom doors were open, there was a tendency for news to be shared simultaneously among family members. Informality was reflected in multiple use of the kitchen and dining room; social interaction was evidenced by free time conversation among family members; job sharing related to household chores. There was a pattern of results which indicated the

TABLE 6

Summary of Empirical Relationships between Jobs around the House and Other Family Activities

Ss did not have strict responsibility for jobs around the house (4 items)	Ss shared jobs around the house with others (6 items)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)	
Items significant $p<.05=4$ $p<.10=2$ Families lived in fewer homes; Ss had brothers and sisters; more persons per bedroom.	Items significant $p<.05=4$ $p<.10=2$ Families lived in fewer homes; lived in areas of smaller populations; Ss had brothers; more persons per bedroom.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)	
Items significant $p<.05=0$ $p<.10=1$ Families ate dinner in the kitchen.	Items significant $p<.05=1$ $p<.10=3$ Families ate together more frequently; mother sat at the end-center and father sat at the end of the table; kitchen used for something other than cooking and eating; dining room used for something other than eating.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)	
Items significant $p<.05=21$ $p<.10=5$ Ss shared a bedroom and a bedroom closet; Ss did not use their bedrooms for studying or entertaining friends; Ss bedroom doors open while sleeping; no one knocked before walking into S's bedroom; everyone walked into S's bedroom without knocking; mother cleaned S's bedroom and made S's bed; lot of space best feature of S's bedroom; not enough space least liked feature of S's bedroom; S's bedroom door open for sleeping; parents' bedroom door open when outside; brother's bedroom door shut when outside; everyone walked into brother's bedroom without knocking; sister's bedroom door open when inside and outside; Ss went into parents' bedroom everyday.	Items significant $p<.05=11$ $p<.10=9$ Ss shared a bedroom (one exception) and a bedroom closet (one exception); Ss entertained friends in their bedrooms; S's bedroom door open when inside and outside, while sleeping; shut for recreation; Ss made their own beds; not enough privacy least liked feature of S's bedroom; parents' bedroom door open when outside (one exception); brother's bedroom door open when inside and while studying; sister's bedroom door open when inside; Ss went into sister's bedroom everyday.

Table 6, cont.

Ss did not have strict responsibility for jobs around the house	*Ss* shared jobs around the house with others
CATEGORY IV Bathrooms (1 item)	
Items significant $p<.05=0$ $p<.10=1$ *Ss* sometimes left the bathroom door open, sometimes shut.	Items significant $p<.05=0$ $p<.10=1$ *Ss* kept the bathroom door shut.
CATEGORY V Special rooms (5 items)	
Items significant $p<.05=2$ $p<.10=1$ Others felt free to use *S*'s and father's special rooms when they were not there; father had a special room.	Items significant $p<.05=6$ $p<.10=4$ Others felt free to use *S*'s special room when he was there and when he was not there; father did not have a special room; mother had a special room.
CATEGORY VI Living room characteristics and activities (3 items)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=1$ *Ss* played games in the living room.
CATEGORY VII General free time activities (21 items)	
Items significant $p<.05=6$ $p<.10=4$ During free time *Ss* did not engage in sports or work on the car; on weekends *Ss* engaged in family conversation; after dinner *Ss* listened to music/radio and watched TV; mother read; father did not read; sisters did not engage in conversation but did listen to music/radio.	Items significant $p<.05=8$ $p<.10=14$ During free time *Ss* worked on the car and doing things with others; on weekends *Ss* engaged in family conversation, watched TV and listened to music; after dinner *Ss* listened to music/radio; mother read; father engaged in conversation; brothers engaged in conversation and sports; sisters engaged in conversation.
CATEGORY VIII Jobs around the house (10 items)	
Items significant $p<.05=9$ $p<.10=2$ *Ss* did not have strict responsibility for lawn or yard work, trash or garbage duties, or bedroom care; *Ss* shared	Items significant $p<.05=27$ $p<.10=6$ *Ss* did not have strict responsibility for lawn or yard work trash or garbage duties, bedroom care, or car repairs or

Table 6, cont.

Ss did not have strict responsibility for jobs around the house	Ss shared jobs around the house with others
lawn or yard work, trash or garbage duties, bedroom care, and car repairs or maintenance.	maintenance; Ss shared lawn or yard work, trash or garbage duties, bedroom care, house maintenance, care of pets and car repairs or maintenance.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)	
Items significant $p < .05 = 0$ $p < .10 = 1$	Items significant $p < .05 = 0$ $p < .10 = 0$
Good news was told to everyone at once or to whomever was present.	

TABLE 7

Summary of Empirical Relationships between the Initial Recipient of News and Other Family Activities

Good news told to mother first (1 item)	Good news told to everyone at the same time or to whomever happened to be around at the time (1 item)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)	
Items significant p<.05=2 p<.10=0	Items significant p<.05=2 p<.10=0
Ss had sisters; more persons per room.	Ss did not have sisters; fewer persons per room.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)	
Items significant p<.05=1 p<.10=1	Items significant p<.05=1 p<.10=1
Kitchen not used for anything other than cooking and eating; dining room was not used for anything other than eating.	Kitchen was used for something other than cooking and eating; dining room was used for something other than eating.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)	
Items significant p<.05=1 p<.10=3	Items significant p<.05=1 p<.10=3
S's bedroom door shut when outside, for sleeping and studying; parents' bedroom door shut when inside.	S's bedroom door open when outside, for sleeping and studying; parents' bedroom door open when inside.
CATEGORY IV Bathrooms (1 item)	
Items significant p<.05=0 p<.10=0	Items significant p<.05=0 p<.10=0
CATEGORY V Special rooms (5 items)	
Items significant p<.05=0 p<.10=0	Items significant p<.05=0 p<.10=0

Table 7, cont.

Good news told to mother first	Good news told to everyone at the same time or to whomever happened to be around at the time
CATEGORY VI Living room characteristics and activities (3 items)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$
CATEGORY VII General free time activities (21 items)	
Items significant $p<.05=2$ $p<.10=1$ During free time Ss did not engage in conversation/phoning; father did not engage in conversation after dinner; sisters did listen to music/radio after dinner.	Items significant $p<.05=2$ $p<.10=1$ During free time Ss did engage in conversation/phoning; father did engage in conversation after dinner; sisters did not listen to music/radio after dinner.
CATEGORY VIII Jobs around the house (10 items)	
Items significant $p<.05=1$ $p<.10-0$ Ss had strict responsibility for lawn or yard work.	Items significant $p<.05-1$ $p<.10=0$ Ss did not have strict responsibility for lawn or yard work.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)	
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$

presence of informality, high social interaction and job sharing in families where good news was told to everyone or anyone vs. families in which good news was initially transmitted to the mother.

Biographical data also suggested that the behavioral pattern described in the propositional statement occurred more often in families with low people:room ratios. In general, however, this proposition is less conclusive than many of the prior ones, being based on fewer items and having fewer reliably significant relationships.

Biographical Properties of Families

Data were collected regarding various biographical characteristics of respondents and their families, including family mobility, socioeconomic status, siblings, persons per room and persons per bedroom. The relationship of these items and other items is summarized in Table 8.

Insert Table 8 about here

Only rarely did propositions seem clear with regard to the relationship between biographical properties and use of the home environment. Typically, there were either very few significant relationships or only marginal ones, and these did not usually fall into a coherent pattern. Therefore, these data will be discussed in general, without offering propositional statements.

Low Mobility Families from Small Population Areas

Although the findings are scattered, there is an indication that low mobile, small town families partially fit the traditional "all American" stereotype. The family ate in the dining room, which was reserved for eating, family members shared jobs and interacted with one another, but also maintained some boundaries by means of closed bedroom doors. Thus, there are some elements of formality, but also evidence for openness and interaction in families from small population areas who had been in their family home for a relatively long period of time.

Socioeconomic Status

Here, also, there were no particularly strong or consistent findings regarding use of the home environment. However, if the limited data are examined, there is a suggestion that higher socioeconomic families exhibit somewhat greater mutual openness and accessibility of bedrooms and other areas.

Siblings and Average Room Density

Some obvious findings emerge from families where respondents had brothers and sisters, i.e., larger families. There was a greater

TABLE 8

Summary of Empirical Relationships between Biographical Properties and Family Activities

Families lived in fewer homes and in smaller population areas (2 items)	Families of higher socio-economic status (1 item)	Ss had brothers and sisters (2 items)	More persons per room and bedroom (2 items)
CATEGORY I Biographical properties of Ss and their families, demographic properties of the location of family home, etc. (7 items)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=3$ $p<.10=1$ More persons per room and per bedroom.	Items significant $p<.05=5$ $p<.10=1$ Ss had brothers and sisters; there were more persons per room and per bedroom.
CATEGORY II Eating activities and kitchen/dining room properties (6 items)			
Items significant $p<.05=1$ $p<.10=1$ Families ate dinner in dining room; dining room not used for anything other than eating.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=1$ Dining room used for something other than eating; mother sat at the corner and father at the end of the table.	Items significant $p<.05=3$ $p<.10=1$ Dining room used for something other than eating; mother sat at the corner and father sat at the end of the table.
CATEGORY III Bedrooms of Ss, parents, brothers, sisters and associated activities undertaken therein (34 items)			
Items significant $p<.05=2$ $p<.10=2$ S's bedroom door shut while sleeping and entertaining friends; Ss visited brother's bedroom a couple of days per week, visited sister's bedroom everyday.	Items significant $p<.05=1$ $p<.10=3$ S's bedroom door open when outside; no one knocked before going in S's bedroom; mother cleaned S's bedroom; sister's bedroom door open when outside.	Items significant $p<.05=7$ $p<.10=3$ Ss shared a bedroom and a bedroom closet; Ss did not entertain friends in bedroom; S's bedroom door open while sleeping, studying, recreation, no one knocked before entering S's bedroom; everyone went in without knocking.	Items significant $p<.05=8$ $p<.10=0$ Ss shared a bedroom and a bed room closet; Ss did not use bedroom for studying; brother's bedroom door open when inside, for recreation, and while studying.

Table 8, cont.

Families lived in fewer homes and in smaller population areas	Families of higher socio-economic status	Ss had brothers and sisters	More persons per room and bedroom
CATEGORY IV Bathrooms (1 item)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Ss always shut the bathroom door.	Items significant $p<.05=0$ $p<.10=1$ Ss sometimes left the bathroom door open, sometimes shut.
CATEGORY V Special rooms (5 items)			
Items significant $p<.05=0$ $p<.10=1$ Others felt free to use S's special room when he was there.	Items significant $p<.05=1$ $p<.10=0$ Others felt free to use S's special room when he was not there.	Items significant $p<.05=1$ $p<.10=0$ Mother did not have a special room.	Items significant $p<.05=1$ $p<.10=2$ Others felt free to use S's special room when he was there; father and mother did not have special rooms.
CATEGORY VI Living room characteristics and activities (3 items)			
Items significant $p<.05=1$ $p<.10=0$ Ss played games in the living room.	Items significant $p<.05=0$ $p<.10=0$ Ss did not watch TV in the living room.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Ss watched TV in the living room.
CATEGORY VII General free time activities (21 items)			
Items significant $p<.05=2$ $p<.10=3$ During free time Ss watched TV; on weekends Ss engaged in family conversation and watching TV; after dinner sisters watched TV.	Items significant $p<.05=2$ $p<.10=0$ After dinner Ss listened to music/radio; after dinner sisters did not watch TV.	Items significant $p<.05=4$ $p<.10=0$ During free time Ss watched TV and worked on car; on weekends Ss did not watch TV.	Items significant $p<.05=2$ $p<.10=3$ During free time Ss did not read; on weekends Ss did not listen to music; after dinner brothers did not engage in conversation.

Table 8, cont.

Families lived in fewer homes and in smaller population areas	Families of higher socio-economic status	Ss had brothers and sisters	More persons per room and bedroom
CATEGORY VIII Jobs around the house (10 items)			
Items significant $p<.05=1$ $p<.10=2$ Ss did not have strict responsibility for bedroom care or car repairs or maintenance; Ss shared bedroom care and care of pets.	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=4$ $p<.10=1$ Ss did not have strict responsibility for lawn or yard work or bedroom care; Ss shared lawn or yard work and bedroom care.	Items significant $p<.05=1$ $p<.10=1$ Ss did not have strict responsibility for bedroom care; Ss shared bedroom care.
CATEGORY IX Locale of news dissemination to various members of the family (1 item)			
Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=0$ $p<.10=0$	Items significant $p<.05=1$ $p<.10=0$ Good news told to mother first.	Items significant $p<.05=1$ $p<.10=0$ Good news told to mother first.

density of people per room, rooms were used for multiple purposes, there was sharing of facilities and jobs, there was less incidence of parents having a special room, and there was some indication of greater openness of bedroom doors. This latter finding--openness of bedroom doors--seemed more related to those families with brothers and sisters than it did to sheer room density alone.

These data are not very strong, but do suggest the importance of a closer examination of family size and density relationships with openness/accessibility and formality. While the data are not convincing, there is a possibility that an important antecedent condition to a family style of openness may be fostered, at least in part, by higher levels of home density. This possibility is considered at greater length in the Discussion section.

Summary of Results

Table 9 lists the general propositions which emerged from the

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Insert Table 9 about here
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analysis of 92 items of the questionnaire. As discussed in the following section, these propositions seem to center around differences in the extent to which families exhibited: (1) openness and accessibility in their use of space, particularly with respect to how doors in bedrooms and other rooms were used, (2) informality-formality, with informality evidenced in use of the kitchen for meals and for multiple activities, and in other behaviors minimizing boundaries between family members, e.g., door knocking, (3) social interaction, as reflected in degree of family member social interaction during free time, frequency of going to others' rooms, sharing and mutual responsibility for various jobs and chores around the home and seating patterns at mealtime. In the discussion to follow, these three classes of behavior and associated propositions are integrated into a general description of different family "ecological styles."

TABLE 9

Summary of Use of Home Environments by Families

Proposition 1. Individual family members are consistent in openness and accessibility of their bedroom across a variety of activities.

Proposition 2. Family members are similar to one another in openness and accessibility of bedrooms.

Proposition 3. Openness/accessibility of bedroom doors is associated with greater informality of family life.

Proposition 4. Openness/accessibility of bedroom doors is associated with overlapping role responsibilities among family members.

Proposition 5. Openness/accessibility of bedroom doors is associated with family social interaction and sharing.

Proposition 6. When families and guests eat in the kitchen (vs. dining room), there is more informality, openness/accessibility throughout the home.

Proposition 7. Specific parental seating patterns at mealtime (father at end of table, mother at end or center) are associated with family openness/accessibility and job sharing.

Proposition 8. Use of the kitchen for meals and other activities is associated with job sharing.

Proposition 9. Openness of bathroom doors is associated with openness/accessibility of bedrooms and family informality.

Proposition 10. The father's possession of a special room is associated with greater family formality and lessened accessibility among family members.

Proposition 11. The greater the availability of special rooms to others, the greater the family openness/accessibility, informality, sharing and social interaction.

Proposition 12. Activities involving high family social interaction are associated with openness/accessibility and job sharing.

Proposition 13. Sharing home jobs is associated with informality, openness/accessibility and enhanced family interaction.

Proposition 14. Initial transmittal of good news by the father to all family members vs. to the mother, is associated with greater family openness/accessibility, social interaction, informality and job sharing.

VI. DISCUSSION AND INTEGRATION OF RESULTS

This section views the results of the study from three perspectives: (1) general practices regarding use of space, particularly "territorial behavior" and "privacy mechanisms" which apply to the whole sample, (2) types of families, distinguished on the basis of their "ecological styles", (3) a temporally based description of the ecology of families over the course of a typical day.

General Characteristics of Use of Home Environments

There were a number of properties of homes and their use which applied to the sample in an almost universal fashion. For example, the referent home was a house rather than an apartment, owned rather than rented, and occupied by a nuclear family with a father, mother and two-three children. The home was typically located on a small lot in a built-up area, in close proximity to neighbors, friends and a variety of community services.

The interior characteristics of the home were also quite common among respondents. There usually were two-three entrances to the home and a kitchen with typical facilities, e.g., stove, refrigerator, table, cabinets, chairs, etc. Living rooms were also quite alike and many had a furniture complex consisting of a sofa, coffee table, end/lamp tables, along with a variety of other furnishings and objects. TVs were usually present in living rooms or family rooms. Family and recreation rooms were less universal in the sample, as were basements, carports and attics.

The typical home had one-one and one half bathrooms and two-three bedrooms, the latter having beds, closets, bureaus and chairs as general furnishings. Most respondents did not share bedrooms, although a substantial number did so. Parents generally occupied the same bedroom and usually shared the same bed for sleeping. Almost half the children in families had TV/tape deck or stereo equipment in their bedrooms, but parents generally did not have such equipment.

A large, though not overwhelming number of fathers and mothers were reported as having "special" rooms, e.g., shop, den, study, etc. However, mothers' special rooms were often quite public or semi-public, i.e., the kitchen or the parental bedroom.

Beyond these general properties, there were a number of universal uses of the home environment which centered around the kitchen, bedrooms, and the bathroom. Most families ate the dinner meal as a family group, whereas breakfast and lunch were typically individual affairs, with people eating separately. Families did differ in the extent to which they had dinnertime meals in the kitchen vs. the dining area, although breakfast and lunch were usually taken in the kitchen. There were also a routinized set of procedures involving meal preparation, cleaning up and seating patterns which applied to most families. For example, female members of the family were usually responsible for food preparation and cleaning up. It is likely that this responsibility is usual in U. S. families beyond the present sample.

More interesting from an interpersonal point of view, the great majority of families usually had fixed seating patterns at the dinner table (which was usually rectangular or oval in shape), with each family member having a particular location defined as his or her own. The children in the family were typically scattered around the table, at ends, corners, or center positions. Parents, however, had characteristic seating locations. The father was typically seated at the end or head of the table. The mother's position was somewhat more varied, equally divided between being at opposite ends to the father or at his adjacent corner, and less frequently at a center position, or at some other location. As indicated below, these different seating patterns fit with a variety of other data, to yield a total family "ecological style."

Mealtime seating practices were not rigid "territorial" behaviors, but fluctuated considerably with the situation. Fixed seating patterns were strong when the family ate together as a group, but broke down at other mealtime circumstances. For example, when individual members of the family ate alone, they did not always return to their usual seat, but were apt to use other seats at the table, typically anywhere. Furthermore, when guests were having dinner with the family, the usual family seating pattern no longer held. Thus, territorial patterns with regard to mealtime seating locations were flexible, and interacted with characteristics of the situation and with the presence of outsiders.

In the same way, mechanisms for maintaining privacy by individual family members also varied as a function of the situation and the nature of activities, and for particular other people in the family. This was evidenced in the way in which family bathrooms and bedrooms were used. There was widespread agreement in the sample that closing bathroom doors and access permitted to others varied directly as a function of the intimacy of the activity. When using the toilet and showering, the bathroom door was usually closed. When dressing, the door was closed less often and for less intimate activities, e.g., for shaving and combing hair, the door was infrequently closed. In addition, the more intimate the activity, the less apt people were to allow others into the bathroom. Again, privacy mechanisms, like seating "territorial" mechanisms varied with situations and activities.

The pattern of situation--specific use of the environment was also indicated in the way in which bedroom doors served as primary mechanisms for different members of the family. Bedrooms were used quite often by family members, obviously for sleeping, but also for studying, recreation and entertainment. With regard to privacy, the door was left open as often as closed when people were in the bedroom, but was usually left open when the room was not occupied. The exception was for sisters, who were more prone to keep their bedroom doors closed. When bedroom doors were closed and people were inside, it was typical for many family members to knock before entering. However, knocking was far more prevalent for bathroom doors than for bedroom doors, and more frequent for parental bedroom doors and sisters' bedroom doors, vs. sons' doors. Thus, the degree to which boundaries were respected varied with the situation and with who was invoking the privacy mechanism.

Common free time activities characterized the sample: TV and music dominated; reading, sports and conversation were fairly typical. Such activities usually took place in living rooms, family rooms and bedrooms. In questions specifically directed toward post dinner recreation, the data suggested that parents and sisters usually went to the living room or family room, whereas boys often left the home. Except in the case of sisters, bedrooms were not often used for post dinner recreation.

In general, then, there are a number of "universal" practices regarding use of the home environment which seemed to center around territorial and privacy phenomena, but which consistently indicated family flexibility in use of space as a function of the nature of the activity, the participants, and the general setting. Beyond these general practices, the data suggest two general family styles of space usage, which incorporate many areas of the home and family activities.

Two Styles of Use of the Environment: Type A and Type B Family Patterns

It appears that there are two general styles of use of the home environment. Figure 21 describes one type of family (Type A), based upon

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Insert Figure 21 about here
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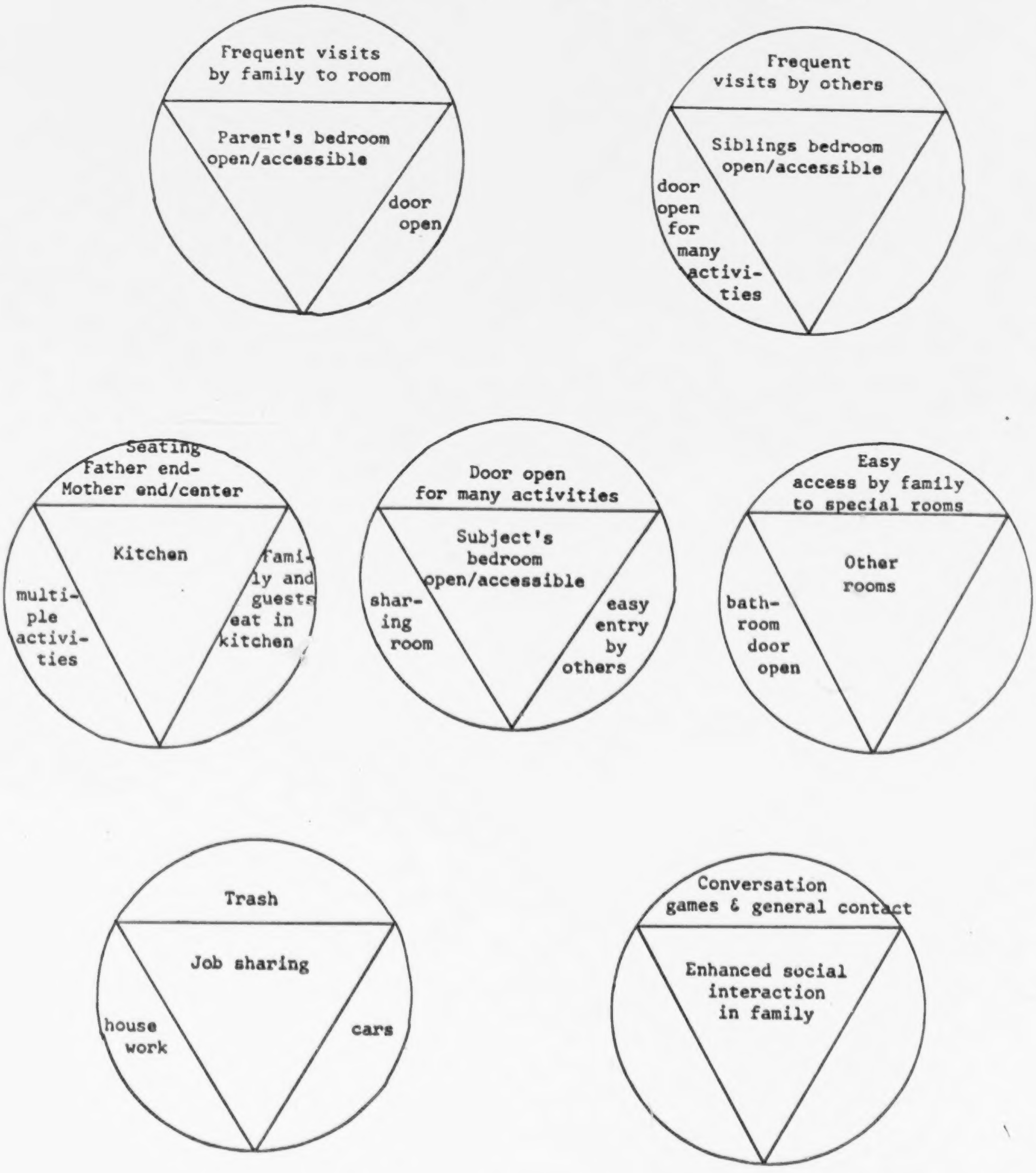
the data presented earlier. Type A families can be described as exhibiting an "open," "accessible," "informal," "shared," "socially active" style of family life. Type B families exhibit the opposite characteristics and generally have firmer boundaries between members of the family, less accessibility to one another's areas and activities, a more formal approach to use of space, and a lesser degree of family interaction. By virtue of the statistical analyses conducted, these two family types are mirror images of one another. For purposes of discussion, we will focus on a description of the Type "A" or "open" family.

The circles in Figure 21 indicate general aspects of family use of the environment or activities which are reliably associated with one another. Thus, how bedrooms are used was related to kitchen and bathroom use, sharing and family interaction, etc. Most of these areas were significantly related to one another for one or more specific questionnaire items. Examples of related items appear in the outer sections of each circle. (To identify specific items and relationships, the reader is referred to Tables 1-8 in the prior section.)

Type A families exhibited a general property of openness and

Figure 21. General summary of results: Type A family pattern


Frequent visits by family to room
Parent's bedroom open/accessible
door open
Frequent visits by others
Siblings bedroom open/accessible
door open for many activities
Seating Father end-Mother end/center
Kitchen
multiple activities
Family and guests eat in kitchen
Door open for many activities
Subject's bedroom open/accessible
sharing room
easy entry by others
Easy access by family to special rooms
Other rooms
bathroom door open
Trash
Job sharing
house work
cars
Conversation games & general contact
Enhanced social interaction in family

accessibility between various members of the family. This was very apparent in the way in which bedroom doors were used. The data indicated that individual members of Type A families tended to leave their bedroom doors open for a variety of activities such as entertaining, sleeping, studying, etc., with everyone else in the family exhibiting the same pattern. Type A homes were those in which bedroom doors were typically open throughout the house and during most times of the day. Type B families had a more closed pattern of use of bedroom doors. Also, Type A families showed a pattern of accessibility between family members which extended to other areas of the home. For example, if Type A parents had special rooms (shop, den, etc.), they made these rooms readily available to others in the family. Type A family members also exhibited a high degree of social interaction with one another, as contrasted with Type B families. They visited one another's bedrooms frequently and the family engaged in social interaction following dinner or in free time, e.g., conversation. Also, Type A families seemed to have fewer interpersonal boundaries around individual members, with overlapping role and job responsibilities such as maintenance of the home, trash, cleaning rooms, etc. Thus, they also shared activities and seemed to do things with one another to a greater extent than did Type B families.

A related property of Type A families was their greater informality in activities and use of space. The family ate dinner in the kitchen and even entertained guests in the kitchen, and rooms seemed to have less strictly defined functions, e.g., the kitchen was used for a multiplicity of purposes beyond eating (whereas in Type B families eating was done in the dining room and rooms seemed to have specific, nonoverlapping functions). In addition, informality in Type A families was demonstrated by the fact that they tended to knock on "closed doors" less often, to have good or bad news that involved the family told to anyone present and/or everyone simultaneously, rather than in some specific order of family status.

Another difference in families concerned the pattern of seating at the family table. Type A, informal/open families tended to have parents seated at opposite ends of the table to one another (or mother at the center and father at the end), whereas Type B families typically had the father at the end of the table and the mother at his adjacent corner. The end-end or end-center pattern may reflect greater family inclusiveness in conversation, less of a formal role distinction between mother and father, and more broadly based family participation in discussions.

It should be noted that the areas and activities which seem most important to family style differences concern bedrooms and kitchens/eating. Items in these two areas, specially bedrooms, were related to the greatest number and variety of other items. Other areas of the home, e.g., bathrooms, living rooms, recreation activities, sharing, etc., do not seem to be at the core of the Type A-Type B family style differences. They correlate systematically with bedroom and kitchen/eating activities and contribute to the pattern, but they do not always relate as broadly to many other item clusters. Thus, they fit well into the pattern, but do not appear to be at the core of either family ecological style.

All in all, we consider it important that such a variety of aspects of family functioning fit together in a systematic way to yield a "typology" of family ecological styles. Furthermore, these patterns cut across a wide variety of levels of interpersonal behavior, e.g., use of space, activities, family role responsibilities, etc. Thus, these data confirm a basic theme of the research, namely, that small groups and interpersonal relationships operate as a complex ecological system at many levels of functioning and involve a systematic interplay between the group and the physical environment.

One Family's Day:

How the Environment is Used in the Course of a Typical Day

This section reconstructs a description of the Type A (open/informal/socially interactive) family as they move through the home environment from the beginning to an end of a typical day. (Again, the Type B family exhibits the opposite pattern.) To provide a comprehensive day-long description, we shall include behaviors uniquely characteristic of Type A families and those which typified all families in the sample and which were "universal." The universal behaviors will be post-scripted by a (U); the Type A behaviors will be post-scripted by an (A).

When the Type A family awakes in the morning, all family members' bedroom doors are open (A), so that it is likely that sounds and communication are readily heard. Families live in relatively modest homes with between three and five bedrooms (U) and only one or one and one-half bathrooms (U). Most families do not appear to have a rigid order policy for who uses the bathroom but operate on a first-come first-serve basis (U). As people drift in and out of the bathroom, they typically close the door when using the toilet and shower (U), and often leave it open when they are shaving or dressing (U). However, Type A family members tend to leave bathroom doors open somewhat more often (A), suggesting that people may have somewhat more interaction as the day begins.

Breakfast is typically a helter-skelter affair, with family members not eating together as often as they do for dinner meals (U). Breakfast and most other meals in families are prepared by the mother, with some assistance from the sister (U). Since breakfast is not as often eaten together by family members, there is a tendency for people to sit anywhere, not at a particular place as they do for the dinner meal (U). The Type A family tends more often to eat breakfast in the kitchen rather than the dining room (A).

With children away at school and the father working, slightly less than half of the mothers remain at home, undertake various household chores or run a number of errands (U). A number of other mothers work full or part time (U). At home, the mother often makes beds, including that of the subject and probably those of other members of the family, although they often share that responsibility (A). Thus, she is likely to be in and out of others' rooms often (A). Also, bedroom doors of Type A families tend to be left open (A).

It is likely that a variety of people flow in and out of the home during the day, including neighbors, deliverymen/salesmen (U). Those who do come to the home and who are not members of the family typically use the front door (U). In the afternoon or evening, as various members of the family come home, they enter the house throughout somewhat different places (U). The male members of the family are more prone to use the side and rear entrances compared with the female members of the family (U). If members of the family have special news, particularly good news, it is not relayed in a particular place or in a particular order of family members (A). Whomever is available is told the information (A).

As the family has dinner, Type A families show characteristic meal-time behavior patterns. They eat dinner together quite often (A), and tend to eat in the kitchen rather than the dining room (A). It is characteristic of all families that they have fixed seating patterns around the table (U), but Type A families more often have mothers and fathers at the ends of the table or father at the end and mother somewhere in the center (A). This seating arrangement probably enhances interaction and participation between all family members. It is likely that conversation is active, ranging over a wide variety of topics of interest to both parents and children, and in which they are all involved to one degree or another. As in breakfast meals, the female members of the family are responsible for preparation and cleaning up (U). If guests are in the home for dinner, the seating patterns are not as fixed as before (U), but the Type A family continues to eat in the kitchen, reflecting considerable family informality (A).

Following dinner, or during general free time, the various members of the family engage in a number of activities, such as chores and jobs around the house, recreation activities, use of bedrooms, or of special rooms in the home (U). With regard to chores and jobs around the house, children in Type A families tend to share responsibilities, rather than having particular jobs assigned to particular members (A). Thus, if house maintenance is done, they do it with others or in alternation with others, as they do for car repairs, care of pets, lawn and yard work, and trash or garbage. As such, it is likely that there is considerable interaction among family members as they negotiate and undertake various tasks. If they become involved in recreation after dinner, there tends to be some scattering of family members, with boys often going out of the home, parents and sisters going to the living room or family recreation areas (U). Type A families, however, tend to engage more often in potentially joint family activities such as watching TV, engaging in conversation, or taking part in games (A). Again, they use their environment in ways which increase the possibility of family member interaction with one another.

If children, in particular, go to their bedroom after dinner, they might use it to entertain friends, to sleep, study or for some recreational activity (U). When Type A family members use their bedroom for any of these things, they leave their door open (A), as do others in their family (A). If people do close their bedroom doors, there tends to be relatively less knocking on doors in Type A families (A), although parents' and sisters' closed doors are more respected than those of boys (U). There is also a high visiting flow to other people's bedrooms (A), suggesting again considerable contact and interaction among Type A family members.

Sometimes parents have special rooms, the father having a den/study, attic or workshop (U), and the mother typically having a more public room, e.g., bedroom or the kitchen (U). In Type A families, these rooms are reasonably accessible to other members of the family (A).

At the end of the day, as members of the family retire for the night, the bathroom is again used on a first-come first-serve basis (U). As they go to sleep, members of Type A families leave their bedroom doors open (A).

Thus, Type A families exhibit a stable pattern of open, accessible, informal, sharing, highly interactive behavior with one another throughout the day and in various parts of the home environment. While there are many commonalities between Type A and Type B families, there do seem to be a broad number of systematically different patterns of use of family environments.

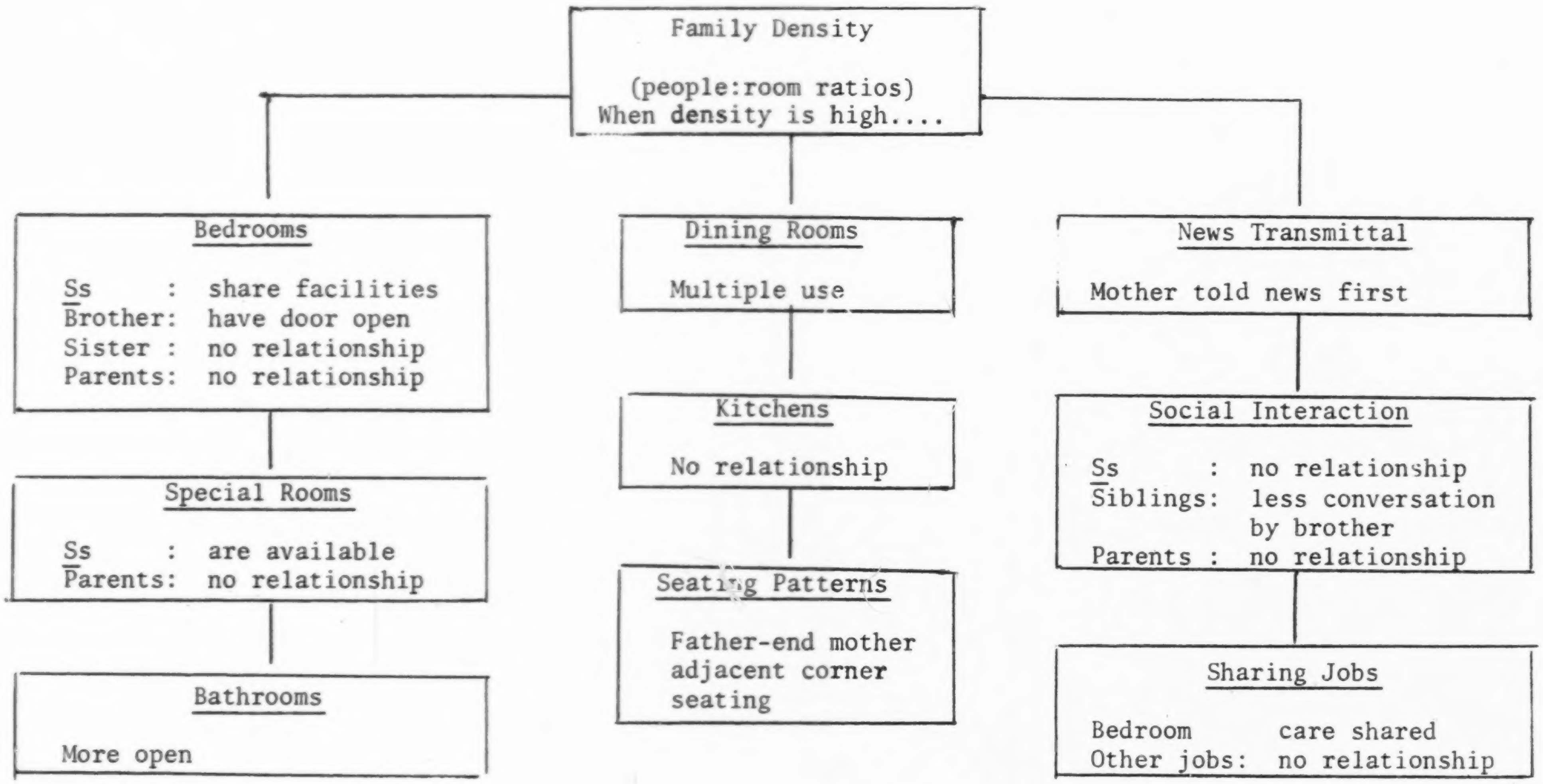
The Role of Family Size/Density

The question naturally arises as to the role of demographic characteristics in accounting for family ecological styles, especially family size, number and type of siblings and, in particular, family density (people per room ratios).

As indicated in the results, there are some hints that family density may be a factor in some, but not all, facets of the Type A family pattern of openness/accessibility, informality, social interaction and job sharing. Intuitively, it seems sensible that high family density could lead to a Type A family style. The more people in the family space, the more interaction possibilities, the greater the likelihood of sharing, the greater the necessity for multiple use of areas, the increased probability of lower privacy, etc. But, the data are not wholly conclusive with respect to this possibility and only provide fragmentary positive evidence. Figure 22 summarizes relationships between family density and other variables. From the figure, there are some indications that the Type A

Insert Figure 22 about here

Figure 22. Home Density and Environmental Use


Family Density
(people:room ratios)
When density is high....
Bedrooms
Ss : share facilities
Brother: have door open
Sister : no relationship
Parents: no relationship
Special Rooms
Ss : are available
Parents: no relationship
Bathrooms
More open
Dining Rooms
Multiple use
Kitchens
No relationship
Seating Patterns
Father-end mother adjacent corner seating
News Transmittal
Mother told news first
Social Interaction
Ss : no relationship
Siblings: less conversation by brother
Parents : no relationship
Sharing Jobs
Bedroom care shared
Other jobs: no relationship

family pattern is associated with increased density, e.g., openness (brother's bedroom door, availability of special rooms, open bathroom door), informality (multiple use of the dining room). But these relationships appear only infrequently. The inconclusive nature of the possibility is also suggested by the fact that there were no relationships between density measures and openness of Ss', parents' or sisters' bedroom doors and no relationships with social interaction, job sharing or use of the kitchen. Thus, while density may well play some role as an antecedent of Type A, Type B family ecological styles, it can only be concluded from the present data that the contribution is minimal, but perhaps worthy of more careful study in future research.

Future Directions of Research

The present study did not examine antecedent factors associated with the use of family environments. Rather, emphasis was placed on identification of similarities and differences among family types and the development of a body of normative, baseline data about home environments. Several directions of future research on the interplay of home environments and interpersonal relations seem promising.

The most general unsettled question concerns factors underlying the Type A-Type B families identified in this study. What antecedent or etiological factors underlie this distinction in family ecological styles? One line of research which received some weak but suggestive support concerns family biographical factors. For example, the sample of this study was from a lower middle class socioeconomic level. It would be interesting to determine whether the Type A-Type B distinction obtained at other socioeconomic levels. More interesting, a study should be conducted to examine families more disparate in size than those in the present sample, to ascertain the effect of family density and size on Type A-Type B behavioral patterns.

At a more social psychological level, one possible direction of future research is to compare patterns of use of environments of integrative well-functioning or adaptive groups vs. those in less stable circumstances. For example, data is now being collected on families with runaway or delinquent teenagers, who are being compared with a matched sample of families without teenagers in a delinquent status. While no hypotheses have been offered, the study is based on the assumption that there may be either Type A-Type B family differences or that other differences in use of home environments may be associated with family situations. On the assumption that use of the environment reflects, in some fashion, the state of an interpersonal relationship, another direction of study could be to examine space use by couples in a situation of marital conflict vs. those in a stable relationship. It would be hypothesized that the way in which the present home environment was used was different for conflict vs. non-conflict couples, and it may even be possible that their individual early home environments were different in some respects, which mirrored or contributed to their marital situation.

At a different level of analysis, it would be interesting to compare social, ethnic and cultural groups with respect to use of home environments. There is a considerable body of sociological and social psychological data which attests to ethnic and cultural differences in social behavior, and there is some anecdotal and scattered empirical data regarding differences in space use among cultures, e.g., the Caudill and Plath (1966 study on sleeping patterns in Japan and Lewis' (1959, 1961) comparison of Mexican families. But there has been little attempt to tie together various facets of cultures *qua* cultures and the use of home environment.

Finally, research might profitably be directed toward refinement of the questionnaire by means of factor, cluster and item analyses, development of a broadened item pool tapping other features of home environments, and analyses of extended environments such as schools, offices, and play areas.

In general, the results of this study point to the need for continued examination of general phenomena associated with use of the environment in interpersonal relationships, such as territorial behavior and privacy, to understand their operation and limiting conditions. Furthermore, these data attest to the value of working within an ecological strategy to interpersonal phenomena--viewing group functioning as occurring at several interrelated levels of behavior, and as systematically varying over time. Having identified some general behavioral patterns of environmental usage and some patterns which broadly distinguish between two general "styles" of environmental usage, the task now remains to test their generality and association with other interpersonal factors.

REFERENCES

Altman, I. Territorial behavior in humans: An analysis of the concept. In L. Pastalan and D. H. Carson (Eds.), *Spatial behavior of older people*. Ann Arbor, Mich.: The University of Michigan-Wayne State University Press, 1970. Pp. 1-24.

Altman, I. Ecological aspects of interpersonal functioning. In A. H. Esser (Ed.), *Behavior and environment: The use of space by animals and men*. New York: Plenum Press, 1971. Pp. 291-306.

Altman, I. An ecological approach to the functioning of social groups. In J. E. Rasmussen (Ed.), *Individual and group behavior in isolation and confinement*. Chicago: Aldine Press, 1972, in press.

Altman, I. & Haythorn, W. W. Interpersonal exchange in isolation. *Sociometry*, 1965, *23*, 411-426.

Altman, I. & Haythorn, W. W. The ecology of isolated groups. *Behavioral Science*, 1967, *12*, 169-182. (a)

Altman, I. & Haythorn, W. W. The effects of social isolation and group composition on performance. *Human Relations*, 1967, 20, 313-340. (b)

Altman, I. & Lett, Evelyn E. The ecology of interpersonal relationships: A classification system and conceptual model. In J. E. McGrath (Ed.), *Social and psychological factors in stress*. New York: Holt, Rinehart and Winston, 1970. Pp. 177-20.

Altman, I. & Taylor D. A. *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart and Winston, 1972, in press.

Altman, I., Taylor, D. A., & Wheeler, L. Ecological aspects of group behavior in social isolation. *Journal of Applied Social Psychology*, 1971, *1*, 76-100.

Appleyard, D. Styles and methods of structuring a city. *Environment and Behavior*, 1970, *2*, 1, 100-117.

Ardrey, R. *The territorial imperative*. New York: Athenum Press, 1966.

Ardrey, R. *The social contract*. New York: Athenum Press, 1970.

Barker, R. G. (Ed.) *The stream of behavior*. New York: Appleton-Century-Crofts, 1963.

Barker, R. G. *Ecological psychology*. Stanford, Calif.: Stanford University Press, 1968.

Barker, R. G. & Gump, P. *Big school, small school*. Stanford, Calif.: Stanford University Press, 1964.

Barker, R. G. & Wright, H. T. *Midwest and its children*. New York: Harper & Row, 1955.

Bechtel, R. B. Human movement and architecture. In H. M. Proshansky, W. H. Ittelson, and L. G. Rivlin (Eds.), *Environmental psychology*. New York: Holt, Rinehart and Winston, 1970. Pp. 642-645.

Bossard, J. H. S. & Boll, E. S. *Ritual in family living*. Philadelphia: University of Pennsylvania Press, 1950.

Calhoun, J. B. Population density and social pathology. *Scientific American*, 1962, *206*, 139-148.

Calhoun, J. Space and the strategy of life. In A. H. Esser (Ed.), *Behavior and environment: The use of space by animals and men*. New York: Plenum Press, 1971.

Canter, D. & Canter, Sandra. Close together in Tokyo. *Design and Environment*, 1971, *2*, 60-63.

Caudill W. & Plath, D. W. Who sleeps by whom? *Psychiatry*, 1966, 29, 344-366.

Chapin, F. S. The effects of slum clearance and rehousing on family and community relationships in Minneapolis. *The American Journal of Sociology*, 1938, *43*, 744-763.

Chapin, F. S. Some housing factors related to mental hygiene. *Journal of Social Issues*, 1951, *7*, Nos. 1 and 2.

Chapin, F. S., Jr. & Hightower, H. C. Household activity patterns and land use. *Journal of the American Institute of Planners*, 1965, *31*, 222-231.

Chapin, F. S., Johanson, C. A., & Johnson, A. L. Rental rates and crowdind in dwelling units in Manhattan. *American Sociological Review*, 1950, *15*, 95-97.

Chermayeff, S. & Alexander, C. *Community and privacy: Toward a new architecture of humanism*. New York: Doubleday, 1963.

Craik, K. H. The comprehension of the everyday physical environment. In H. M. Proshansky, W. H. Ittelson and L. G. Rivlin (Eds.), *Environmental Psychology*. New York: Holt, Rinehart and Winston, 1970. Pp. 646-658. (a)

Craik, K. H. Environmental psychology. In K. Craik, B. Kleinmutz, R. C. Rosnow, R. Rosenthal, J. A. Cheyne and R. H. Walters (Eds.), New directions in social psychology. New York: Holt, Rinehart and Winston, 1970. Pp. 3-121. (b)

Davis, Anne & Olesen, Virginia. Communal work and living: Notes on the dynamics of social distance and social space. Sociology and Social Research, 1971, 55, 2, 191-202.

Deutsch, M. & Collins, M. E. Interracial housing: A psychological evaluation of a social experiment. Minneapolis: University of Minnesota Press, 1951.

Downs, R. & Stea, D. Cognitive mapping: Images of man's spatial environment. New York: Atherton Press, 1972, in press.

Esser, A. H. (Ed.) Behavior and environment: The use of space by animals and men. New York: Plenum Press, 1971.

Felipe, Nancy J. & Sommer, R. Invasions of personal space. Social Problems, 1966, 14, 206-214.

Festinger, L., Schachter, S., & Back, K. Social pressures in informal groups: A study of human factors in housing. New York: Harper, 1950.

Freedman, J. L. The crowd--maybe not so madding after all. Psychology Today, 1971, 5, 4, 58-62.

Glaser, D. Architectural factors in isolation promotion in persons. In D. Glaser (Ed.), The effectiveness of a prison and parole system. New York: Bobbs-Merrill, Inc., 1964.

Goffman, E. The presentation of self in everyday life. New York: Anchor Books, 1959.

Goffman, E. Encounters. Indianapolis: Bobbs-Merrill, 1961.

Griffitt, W. & Veitch, R. Hot and crowded: Influences of population density and temperature on interpersonal affective behavior. Journal of Personality and Social Psychology, 1971, 17, 1, 92-98.

Grootenboer, E. A. The relation of housing to behavior disorder. American Journal of Psychiatry, 1962, 119, 469-472.

Hall, E. T. The hidden dimension. New York: Doubleday, 1966.

Haythorn, W. W. & Altman, I. Together in isolation. Transaction, 1967, 4, 18-22. (a)

Haythorn, W. W. & Altman, I. Personality factors in isolated environments. In M. H. Appley and R. Trumbull (Eds.), Psychological stress: Issues in research. New York: Appleton-Century-Crofts, 1967. Pp. 363-386. (b)

Haythorn, W. W., Altman, I., & Myers, T. Emotional symptomatology and stress in isolated pairs of men. Journal of Experimental Research in Personality, 1966, 1, 290-305.

Ittelson, W. H., Proshansky, H. M., & Rivlin, L. G. Bedroom size and social interaction of the psychiatric ward. Environment and Behavior, 1970, 2, 3, 255-270. (a)

Ittelson, W. H., Proshansky, H. M., & Rivlin, L. G. The use of behavioral maps and environmental psychology. In H. M. Proshansky, W. H. Ittelson, and L. G. Rivlin (Eds.), Environmental Psychology. New York: Holt, Rinehart and Winston, 1970. Pp. 658-668. (b)

Jacobs, Jane. The life and death of great American cities. New York: Random House, 1961.

Kasmar, Joyce Z. The development of a usable lexicon of environmental descriptors. Environment and Behavior, 1970, 2, 2, 153-169.

Kira, A. Privacy and the bathroom. From The bathroom: Criteria for design. Ithaca, N.Y.: Center for Housing and Environmental Studies, Cornell University, 1966.

Kuper, L. Neighbor on the hearth. In L. Kuper (Ed.), Living in towns. London: The Cresset Press, 1953. Chapter 2.

Ladd, Florence. Black youths view their environment: Neighborhood maps. Environment and Behavior, 1970, 2, 1, 74-99.

Lett, Evelyn E., Clark, W., & Altman, I. A propositional inventory of research on interpersonal distance. Technical Report No. 1. Naval Medical Research Institute, Bethesda, Md. 1969.

Lewis, O. Five families. New York: Mentor Books, 1959.

Lewis, O. Privacy and crowding in poverty. In O. Lewis, The Children of Sanchez. New York: Random House, 1961.

Loring, W. C. Housing characteristics and social disorganization. Social Problems, 1956, 3, 160-168.

Lynch, K. & Rivkin, M. A walk around the block. Landscape, 1959, 8, 24-34.

Michelson, W. Man and his urban environment: A sociological approach. Reading, Mass.: Addison-Wesley, 1970.

Osmond, H. Function as the basis of psychiatric ward design. Mental Hospitals, 1957, 8, 23-30.

Osmond, H. Some psychiatric aspects of design. Who Designs America? Garden City, N.Y.: Anchor Books, 1966.

Pastalan, L. & Carson, D. H. Eds.) Spatial behavior of older people. Ann Arbor, Mich.: The University of Michigan-Wayne State University Press, 1970.

Patterson, M. Spatial factors in social interactions. Human Relations, 1968, 21, 351-361.

Patterson, M. L., Mullens, S., & Romano, J. Compensatory reactions to spatial intrusion. Sociometry, 1971, 34, 114-121.

Plant, J. S. Some psychiatric aspects of crowded living conditions. American Journal of Psychiatry, 1930, 9, 5, 849-860.

Plant, J. S. Personality and an urban area. In P. K. Hatt and A. J. Reiss, Jr. (Eds.), Reader in urban society. Glencoe, Ill.: Free Press, 1951. Pp. 574-592.

Preiser, W. F. Behavioral design criteria: Student housing. Research Report No. 1. Blacksburg, Va.: Environmental Systems Laboratory, College of Architecture, Virginia Polytechnic Institute, 1969.

Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. Environmental Psychology. New York: Holt, Rinehart and Winston, 1970. (a)

Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. Freedom of choice in behavior in a physical setting. In H. M. Proshansky, W. H. Ittelson and L. G. Rivlin (Eds.), Environmental Psychology. New York: Holt, Rinehart and Winston, 1970. Pp. 173-183. (b)

Richardson, E. The physical setting and its influence on learning. In H. M. Proshansky, W. H. Ittelson, and L. G. Rivlin (Eds.), Environmental Psychology. New York: Holt, Rinehart and Winston, 1970.

Rosengren, W. R. & DeVault, S. The sociology of time and space in an obstetrical hospital. In E. Freidson (Ed.), The hospital in modern society. Glencoe, Ill.: The Free Press, 1963.

Schmitt, R. C. Density, delinquency and crime in Honolulu. Sociology and Social Research, 1957, 41, 274-276.

Schmitt, R. C. Implications of density in Hong Kong. Journal of the American Institute of Planners, 1963, 24, 3, 210-217.

Schmitt, R. C. Density, health and social disorganization. Journal of the American Institute of Planners, 1966, 32.

Schorr, A. L. Slums and social insecurity. United States Department of Health, Education and Welfare, Social Security Administration, Division of Research and Statistics, Research Report No. 1. Washington, D.C. 1963.

Simmel, G. The metropolis and mental life. In P. K. Hatt and A. J. Reiss, Jr. (Eds.), Reader in urban life. Glencoe, Ill.: The Free Press, 1951. Pp. 563-574.

Sivadon, P. Space as experienced: Therapeutic implications. L'Evolution Psychiatrique, 1955.

Sommer, R. The ecology of privacy. The Library Quarterly, 1966, 36, 234-248.

Sommer, R. Classroom ecology. Journal of Applied Behavioral Science, 1967, 3, 4, 489-503. (a)

Sommer, R. Small group ecology. Psychological Bulletin, 1967, 2, 35-152. (b)

Sommer, R. Personal space. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

Sommer, R. The ecology of study areas. Environment and Behavior, 1970, 2, 3, 271-280.

Sommer, R. & Becker, S. D. Territorial defense and the good neighbor. Journal of Personality and Social Psychology, 1969, 11, 2, 85-92.

Stea, D. & Downs, R. M. From the outside looking in at the inside looking out. Environment and Behavior, 1970, 2, 1, 3-13.

Steinzor, B. The spatial factors in face to face discussion groups. Journal of Abnormal and Social Psychology, 1950, 45, 552-555.

Strauss, A. Life styles and urban space. In A. Strauss (Ed.), Images of the American life. Glencoe, Ill.: The Free Press, 1961.

Studer, R. G. The dynamics of behavior-contingent physical system. In G. Broadbent and A. Ward (Eds.), Portsmouth College of Technology Symposium on Design Methods, Portsmouth, England. London: Messrs. Lund Humphries Ltd., 1969.

Suttles, G. D. The social order of the slum. Chicago: The University of Chicago Press, 1968.

Sykes, G. The prisoner's status as conveyed by the environment. In G. M. Sykes (Ed.), The society of captives: A study of a maximum security prison. Princeton, N.J.: Princeton University Press, 1958.

Taylor, D. A. Some aspects of the development of interpersonal relationships: Social penetration processes. Journal of Social Psychology, 1968, 75, 79-90.

Taylor, D. A., Altman, I., & Sorrentino, R. Interpersonal exchange as a function of rewards and costs and situational factors: Expectancy confirmation disconfirmation. Journal of Experimental Social Psychology, 1969, 5, 324-339.

Taylor, D. A., Altman, I., Wheeler, L., & Kushner, Estelle N. Personality factors related to response to social isolation and confinement. Journal of Consulting and Clinical Psychology, 1969, 33, 411-419.

Taylor, D. A., Wheeler, L., & Altman, I. Stress reactions in socially isolated groups. Journal of Personality and Social Psychology, 1968, 9, 369-376.

White, L. E. The outdoor play of children living in flats: An inquiry into the use of courtyards as playgrounds. In L. Kuper (Ed.), Living in towns. London: Cresset Press, 1953. Pp. 235-258.

Winkel, G. H. & Sasanon, R. An approach to an objective analysis of behavior and architectural space. In H. M. Proshansky, W. H. Ittelson and L. G. Rivlin (Eds.), Environmental Psychology. New York: Holt, Rinehart and Winston, 1970. Pp. 619-631.

Winsborough, H. H. The social consequences of high population density. Law and Contemporary Problems, 1965, 30, 120-126.

Winsborough, H. H. & Davis, J. E. Partial associations between intra-urban population densities and vital rates. Population Index, 1963, 29, 227-228.

Wirth, L. Urbanism as a way of life. American Journal of Sociology, 1938, 44, 1-24.

Wohlwill, J. S. Behavioral responses and adaptation to environmental stimulation. In A. Damon (Ed.), Physical anthropology. Cambridge, Mass.: Harvard University Press, 1971

Wolff, M. & Hirsch, V. Some pedestrian observations. Time, May 11, 1970, 66.

Wynne-Edwards, V. C. Animal dispersion in relation to social behavior. New York: Hafner, 1962.

Yancey, W. L. Architecture, interaction and social control: The case of a large-scale public housing project. Environment and Behavior, 1971, 3, 1, 3-21.

Young, M. & Wilmott, P. Family and kinship in East London. Glencoe, Ill.: The Free Press, 1957.

Zlutnick, S. & Altman, I. Crowding and human behavior. In J. F. Wohlwill and D. H. Carson (Eds.), Behavioral science and the problems of our environment. American Psychological Association, 1972, in press.

APPENDIX A

HOME ENVIRONMENT QUESTIONNAIRE

ECO-2 Questionnaire

72	Deck #1
73-75	Subject #_ _ _
76-78	Sample#0 0 2
79-80	Biographical 0 1

Name________________________________ Date_______________________

Service Number____________

1-2 1. How old are you?______________

2. Where were you born?

4-5 ______________________________City
6-7 ______________________________State

9-10 3. What is the highest grade in school you completed?_____________________

12 4. Do you plan to go back to school after you leave the Navy?

1_______yes
2_______no

14-15 5. If yes, what are your educational plans?_______________________________
____
____

17-18 6. What are your career plans after you leave the Navy?_____________________
____
____
____

20 7. In how many different homes have you lived?___________________________

22 8. How much have you traveled?____

1_______every few months
2_______about once a year
3_______every couple of years
4_______less than every couple of years

24-25 9. How old is your father?_______________________________________

Biographical (cont'd.)

27-28 10. Where was your father born?________________________________

30-31 11. What is the highest grade in school that your father completed?__________

33-34 12. What is your father's occupation?____________________________

36-37 13. How old is your mother?__________________________________

39-40 14. Where was your mother born?________________________________

42-43 15. What is the highest grade in school that your mother completed?__________

45-46 16. What is your mother's occupation?____________________________

1_______housewife
_______other, specify________________________________
____

ECO-2 Questionnaire

72	Deck #1
73-75	Subject #_ _ _
76-78	Sample #0 0 2
79-80	General Home 0 2

Name____

1 1. Is the place you are going to focus on your family's home?

1_______yes
2_______no

3 2. If it is not, specify with whom you lived.

1_______friends
2_______relatives
3_______orphanage
_______other, specify________________________

5 3. What type of residence was it?

1_______house
2_______apartment
3_______mobile home
_______other, specify________________________

7 4. If you lived in a house who owned it?

1_______parents
2_______relatives
3_______rented
_______other, specify________________________

9 5. If you lived in a house how large was the lot?

1_______less than 1/4 acre
2_______1/4 - 1/2 acre
3_______1/2 - 1 acre
4_______more than 1 acre

6. Indicate the name of the city and state where the residence was located.

11-12 ________________________city
13-14 ________________________state

16 7. What type of area was that?

1_______city
2_______town
3_______suburb
4_______rural area
_______other, specify_______________________________

18 8. What was the population in the area at the time you lived there?

1_______less than 2,000 people
2_______2,000 to 25,000 people
3_______25,000 to 100,000 people
4_______100,000 to 250,000 people
5_______larger than 250,000 people

9. How far was your home located from the nearest:

20-21 _______grocery store
22-23 _______friend's house
24-25 _______movie
26-27 _______neighbor

10. How old were you when you lived in this place?

29-32 Age_______ to _______ years old

11. Check who else lived in the home with you.

34 _______mother
35 _______father
36 _______older brothers: How many?______ Present ages?___________
37 _______younger brothers: How many?_____ Present ages?___________
38 _______older sisters: How many?______ Present ages?___________
39 _______younger sisters: How many?_____ Present ages?___________
40-41 _______anyone else: Who?_______________________________

12. The following questions deal with the number of rooms in your home:

43 A. How many bedrooms were there?____________

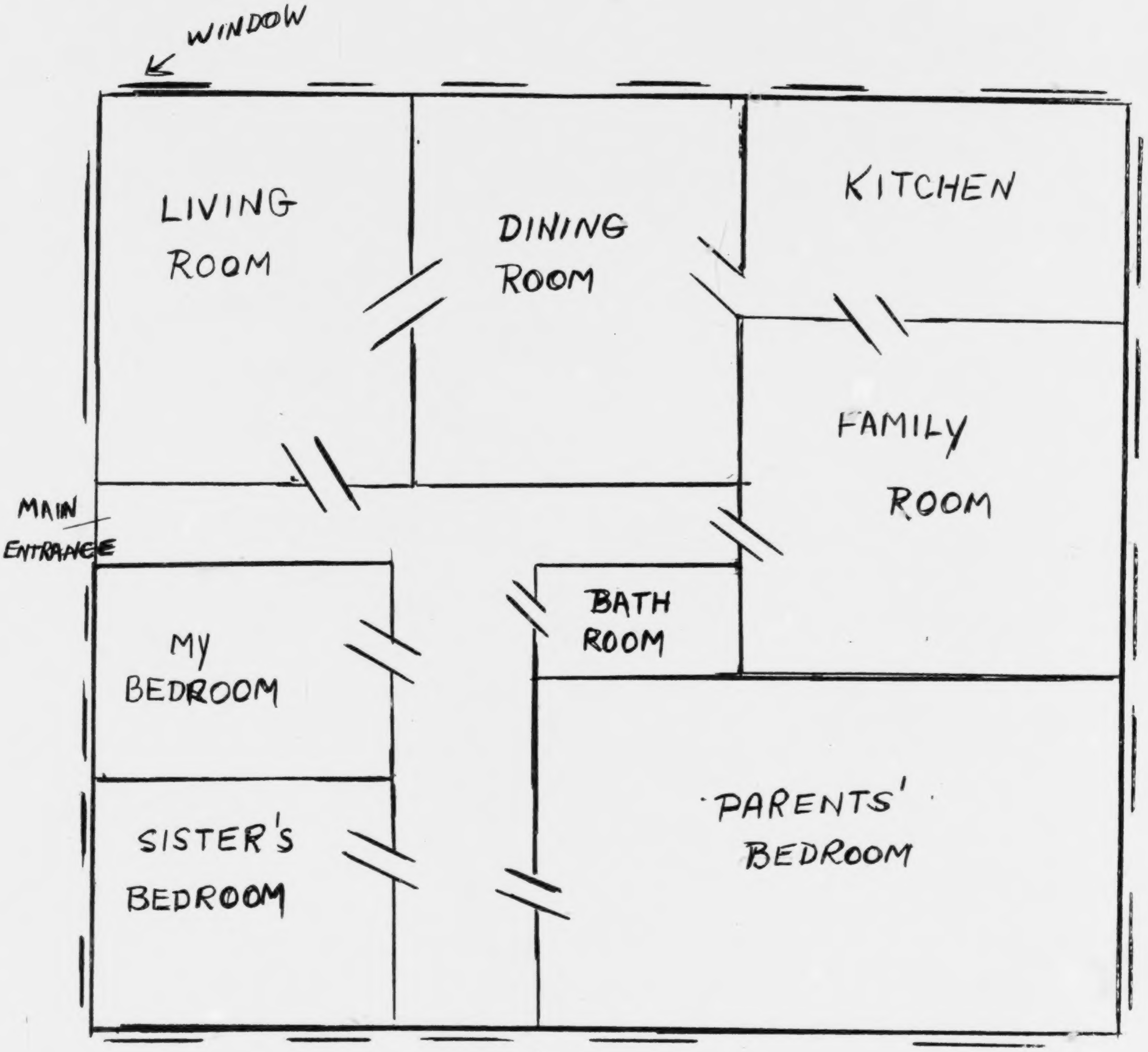
45 B. How many bathrooms were there?____________

C. Check which of the following were in your home:

46 _______living room
47 _______den
48 _______recreation or family room
49 _______dining room
50 _______kitchen
51 _______basement
52 _______attic
53 _______garage
54-55 _______other, specify__________________________________

13. On the next page is a sample of one type of home design which includes the kind of information we are looking for. Yours will be different but be sure to include the kind of rooms that apply to your home including the basement, attic, garage, entrances, etc. Draw the layout of each floor of your home as best you can. Do not worry about size or scale but focus on where the rooms were in relationship to each other. Label how each was used, e.g. living room, my bedroom, father's workshop, etc. Indicate the location of doors, entrances, closets and windows. Draw the diagram of your home on page 7.

Sample layout of a one story house


WINDOW
LIVING ROOM
DINING ROOM
KITCHEN
FAMILY ROOM
MAIN ENTRANCE
BATH ROOM
MY BEDROOM
SISTER'S BEDROOM
PARENTS' BEDROOM

General Home (cont'd.)

57 14. How many entrances did your home have?____________.

If your home had more than one entrance indicate which one was usually used by:

58 _______you
59 _______your mother
60 _______your father
61 _______your brothers
62 _______your sisters
63 _______neighbors
64 _______parents' guests
65 _______your friends
66 _______salesmen or delivery people
67-69 _______anyone else? Specify________________________________
____
____

72	Card #1
73-75	Subject # _ _ _
76-78	Sample #0 0 2
79-80	Eating 0 3

ECO-2 Questionnaire

Name________________________________

This section deals with meal time activities and use of various rooms.

1-2 1. Who usually prepared the meals?

____

4-5 2. If anyone else helped list them:

____
____
____
____

7-8 3. Who usually did the dishes?

____

10-11 4. If anyone else helped, list them:

____
____
____
____

13-14 5. Who usually set the table?

____

16-17 6. If anyone else helped, list them:

____
____
____
____

19 7. How often did your entire family eat breakfast together?

1_______every day
2_______most days
3_______a couple of days a week
4_______hardly ever

21 8. How often did your entire family eat lunch together?

1_______every day
2_______most days
3_______a couple of days a week
4_______hardly ever

23 9. How often did your entire family eat dinner together?

1_______every day
2_______most days
3_______a couple of days a week
4_______hardly ever

10. In which room did your family usually eat

25 ______________breakfast
26 ______________lunch
27 ______________dinner

29 11. What shape was the table that was used when the family ate meals together?

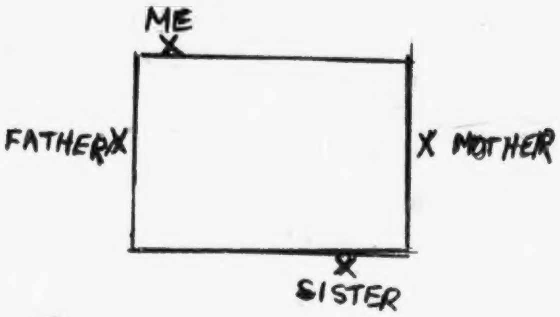
1_______rectangular
2_______square
3_______round
_______other, specify________________________________

31 12. When your family ate together did people usually sit in certain places?

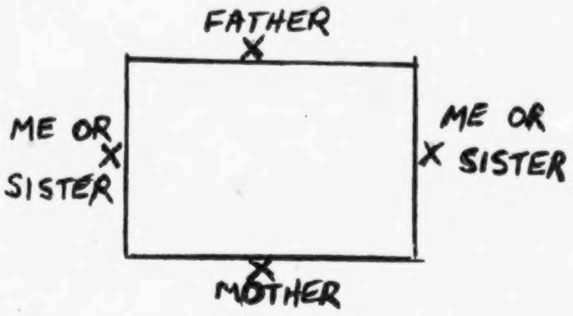
1_______yes
2_______no

33-34 13. If yes, draw the table and indicate each person's place with an "x" and label it:

Examples:


ME
FATHER X
X MOTHER
X
SISTER

OR


FATHER
X
ME OR
X
SISTER
ME OR
X SISTER
X
MOTHER

36 14. Did anyone have a chair that was considered his or her own chair?

1________yes
2________no

38-39 15. If yes, who?

____
____
____
____

Eating (cont'd.)

41-42 16. When you did not eat with the rest of your family did you sit in a certain place?

10_______yes, same as when everyone ate together
_______yes, but not the same as when everyone ate together. Where was it?_______________
30_______no, sat any place at the table
_______other, specify_______________
____

44 17. When your family invited guests for meals in which room did the family usually eat?

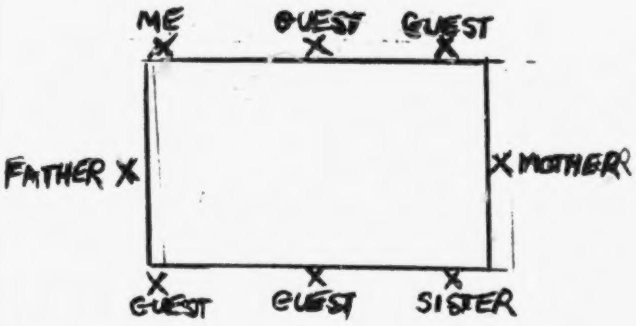
____

46 18. When your family had guests for meals did people usually sit in certain places?

_______yes
_______no

48-49 19. If yes, draw the table and indicate where each person usually sat with an "x" and label it, as you did for question 13.

Example:

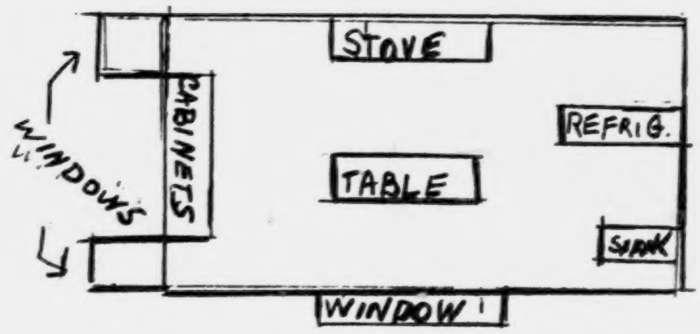


51 20. When you invited guests for a meal in which room did you usually eat?

____

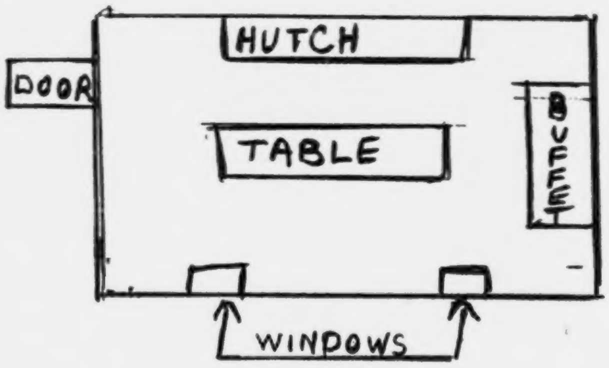
53-56 21. Draw a large scale layout of the kitchen including such objects as the stove, refrigerator, sink, windows, cabinets, table, entrances, etc.

Sample:


STOVE
REFRIG.
CABINETS
TABLE
WINDOWS
SINK
WINDOW

58-61 22. If your home had a dining room, draw a large scale layout of the dining room including such objects as the hutch, buffet, windows, door, table, entrances, etc.

Sample:


HUTCH
DOOR
TABLE
BUFFET
WINDOWS

Eating (cont'd.)

63-66 23. If other rooms were used for meals, draw a layout of them including large pieces of furniture. Be sure to label all objects and include doors and windows.

ECO-2 Questionnaire

72	Deck #1
73-75	Subject #_ _ _
76-78	Sample #0 0 2
79-80	Bedrooms 0 4

Name________________________________

The following questions deal with your bedroom:

1-4 1. Draw a diagram of your bedroom including and labeling the furniture in it and including entrances, closets, beds, chest of drawers, bureaus, dressers, desks, tables, chairs, etc., TV, record player, radio, bookcases and windows, pictures and other wall decorations. If you shared your room indicate which objects belonged to whom.

6-7 2. If you shared your bedroom, who else used it?____________________

9 3. Did you share a dresser, bureau or chest of drawers?

1_______yes
2_______no

11-12 4. If yes, how was it divided between you?

01_______we used drawers on different sides
02_______one person used the top drawers, the other person used the bottom drawers, or we alternated drawers
03_______we shared most drawers
_______other, specify____
____

14 5. Did you share a bedroom closet?

1_______yes
2_______no

16-17 6. If yes, how was the closet space divided?

01_______used different sides
02_______put clothes anywhere
_______other, specify____
____

19-20 7. If your bedroom contained a desk, who usually used it?

01_______no desk in room
02_______each occupant had his own
03_______me
04_______person sharing room
05_______both of us
_______other, specify____
____

22-23 8. If your bedroom had a bookcase, who usually used it?

01_______no bookcase in room
02_______each occupant had his own
03_______me
04_______person sharing room
05_______both of us
_______other, specify____
____

25-26 9. If bookcases were shared, how was the space divided up?

01_______used different sides of shelves
02_______used different shelves
03_______put our books anywhere
_______other, specify____
____

28-30 10. If there was a TV, record player, radio, etc., in your bedroom, indicate who used which items and about how many days a week the items were used by each person.

Item	Users	Days/Week Used
________________	________________	________________
________________	________________	________________
________________	________________	________________
________________	________________	________________
________________	________________	________________
________________	________________	________________
________________	________________	________________
________________	________________	________________

11. For what else did you use your bedroom besides sleeping?

32 _______studying
33 _______entertaining friends
34 _______recreation: e.g. reading, records, TV, etc.
35-36 _______other, specify____
____
____

38 12. Did you usually keep your bedroom door open or shut when you were in the bedroom?

1_______open
2_______shut

40 13. When you were not in your bedroom, did you usually keep the door open or shut?

1_______open
2_______shut

Bedrooms (cont'd.)

14. For which activities did you usually keep your bedroom door open?

42 ________none
43 ________sleeping
44 ________studying
45 ________entertaining friends
46 ________recreation
47-48 ________other, specify____
____
____

15. For which activities did you usually keep your bedroom shut?

50 ________none
51 ________sleeping
52 ________studying
53 ________entertaining friends
54 ________recreation
55-56 ________other, specify____
____
____

58-59 16. When your bedroom door was shut who usually knocked before coming in?

01________no one in family
02________everyone in family
________certain persons, including friends, who?________________
________other, specify____

61-62 17. When your bedroom door was shut who usually walked in without knocking?

01________no one in family
02________everyone in family
________certain persons, including friends, who?________________
________other, specify____

64-65 18. Who usually cleaned your bedroom?

____

67-68 19. Who usually made your bed?

____

ECO-2 Questionnaire

72	Deck #2
73-75	Subject #___
76-78	Sample #0 0 2
79-80	Bedroom 0 4

Bedrooms (cont'd)

Name____________________

1 20. Did you like the way your room was arranged?

1_______yes
2_______no

3-4 21. What do you remember as the best feature of your bedroom?

01_______certain objects in it, specify____________________
02_______the way it was arranged, specify____________________
03_______lot of space____________________
04_______privacy____________________
_______other, specify____________________

6-7 22. What do you recall as the thing you liked least about your bedroom?

01_______certain objects in it, specify____________________
02_______the way it was arranged, specify____________________
03_______not enough space____________________
04_______not enough privacy/having to share the room, specify____________________
_______other, specify____________________

9-10 23. Draw a diagram of your parents' bedroom including and labeling the furniture in it. Include entrances, closets, windows, pictures and other wall decorations and beds, chest of drawers, bureaus, dressers, tables, chairs, TV, record player, radio, bookcases, etc. Be sure to indicate which objects belonged to your mother and which to your father.

12 24. When your parents were in their bedroom, did they usually keep their bedroom door open or shut?

1_______open
2_______shut

14 25. When your parents were not in their bedroom, did they usually keep their bedroom door open or shut?

1_______open
2_______shut

16-17 26. For which activities did your parents usually keep their bedroom door open?

____
____

19-20 27. For which activities did your parents usually keep their bedroom door shut?

____
____

22-23 28. When your parents' bedroom door was shut, who usually knocked before going in?

01_______ no one in family
02_______everyone in family
_______certain persons including friends, who?________________
____
_______other, specify________________________
____

25-26 29. When your parents' door was shut who usually walked in without knocking?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?________________
____
_______other, specify________________________
____

28-31 30. Draw a diagram of each brother's bedroom, indicate whose it was and include and label the furniture in it including entrances, closets, beds, chest of drawers, bureaus, dressers, desks, tables, chairs, TV, record player, radio, bookcases, windows, pictures and other wall decorations. For shared bedrooms indicate which objects belonged to whom. Place each diagram on a separate page.

Bedrooms (cont'd.)

33 31. When your brothers (excluding ones sharing your room) were in their bedrooms, did they usually keep the door open or shut?

1_______open
2_______shut

35 32. When your brothers (excluding ones sharing your room) were not in their bedrooms, did they usually keep the door open or shut?

1_______open
2_______shut

33. For which activities did your brothers (excluding ones sharing your room) usually keep their bedroom doors open?

37 _______none
38 _______sleeping
39 _______studying
40 _______entertaining friends
41 _______recreation
42-43 _______other, specify____
____

34. For which activities did your brothers (excluding ones sharing your room) usually keep their bedroom doors shut?

45 _______none
46 _______sleeping
47 _______studying
48 _______entertaining friends
49 _______recreation
50-51 _______other, specify____
____

53-54 35. When their door was shut who usually knocked before going in?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?________________
____
_______other, specify____
____

56-57 36. When their door was shut who usually walked in without knocking?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?____________________
____
_______other, specify______________________________________
____

ECO-2 Questionnaire

72	Deck #3
73-75	Subject #_ _ _
76-78	Sample # 0 0 2
79-80	Bedrooms 0 4

Bedrooms (cont'd.)

Name________________________________

1-4 37. Draw a diagram of each sister's bedroom, indicate whose room it was and include and label the furniture in it including entrances, closets, beds, chest of drawers, bureaus, dressers, desks, tables, chairs, TV, record player, radio, bookcases, windows, pictures, and other wall decorations. For shared bedrooms indicate which objects belong to whom. Place each diagram on a separate page.

150 Bedrooms (cont'd.)

6 38. When your sisters were in their bedrooms, did they usually keep their doors open or shut?

1_______open
2_______shut

8 39. When your sisters were not in their bedrooms did they usually keep their doors open or shut?

1_______open
2_______shut

40. For which activities did your sisters usually keep their bedroom door open?

10 _______none
11 _______sleeping
12 _______studying
13 _______entertaining friends
14 _______recreation
15-16 _______other, specify_______________________________________

41. For which activities did your sisters usually keep their bedroom door shut?

18 _______none
19 _______sleeping
20 _______studying
21 _______entertaining friends
22 _______recreation
23-24 _______other, specify_______________________________________

26-27 42. When their door was shut who usually knocked before going in?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?_______________________
_______other, specify_______________________________________

29-30 43. When their door was shut who usually walked in without knocking?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?_______________
____
_______other, specify_______________________________
____

32 44. Did you go into your parents' bedroom?

1_______yes
2_______no

45. If yes, why?

34 _______conversation
35 _______study
36 _______borrow or return things
37 _______read
38 _______TV, music
39-40 _______other, specify_______________________________
____

42 46. If yes, how often did you usually go?

1_______every day
2_______a couple of days a week
3_______once a week
4_______less than once a week

44 47. Did you go into your brothers' bedrooms?

1_______yes
2_______no

48. If yes, why?

46 _______conversation
47 _______study
48 _______borrow or return things
49 _______read
50 _______TV, music
51-52 _______other, specify_______________________________
____

54 49. If yes, how often did you usually go?

1_______every day
2_______a couple of times a week
3_______once a week
4_______less than once a week

56 50. Do you go in to your sisters' bedrooms?

1_______yes
2_______no

51. If yes, why?

58 _______conversation
59 _______study
60 _______borrow or return things
61 _______read
62 _______TV, music
63-64 _______other, specify_______________________________________

____

66 52. If yes, how often did you usually go?

1_______every day
2_______a couple of days a week
3_______once a week
4_______less than once a week

ECO-2 Questionnaire

72 | Deck #1
73-75 | Subject #___
76-78 | Sample #0 0 2
79-80 | Bathroom 0 5

Name____

The following set of questions deal with the bathroom.

1-2 1. If your home had more than one bathroom, who shared each?

____
____
____

Now focus on the one you usually used:

4 2. When you were using the bathroom did you typically have the door open or shut?

1_______always open
2_______sometimes open, sometimes shut
3_______always shut

3. When typically open, which activities were you doing?

6 _______shaving or hair combing
7 _______showering or bathing
8 _______using the toilet
9 _______dressing
10-11 _______other, specify______________________________
____
____

4. When typically shut which activities were you doing?

13 _______shaving or hair combing
14 _______showering or bathing
15 _______using the toilet
16 _______dressing
17-18 _______other, specify______________________________
____
____

20-21 5. If the door was shut, who usually knocked before going in?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify________________________________
____

23-24 6. If the door was shut, who usually walked in without knocking?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify________________________________
____

26 7. When you wanted to use the bathroom and the door was shut did you knock before entering?

1_______always
2_______sometimes
3_______never

28 8. When you were using the bathroom were others ever allowed in?

1_______yes
2_______no

30-31 9. If yes, whom would you allow in the bathroom if you were shaving or combing your hair?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify________________________________
____

Bathroom (cont'd.)

33-34 10. If you were showering or bathing?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify______________________________
____

36-37 11. If you were using the toilet?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify______________________________
____

39-40 12. If you were dressing?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify______________________________
____
99_______did not dress in bathroom

42 13. Was there a general policy for who would use the bathroom first?

1_______yes
2_______no, first one there used it

44-45 14. If yes, what was it?__________________________________
____
____

ECO-2 Questionnaire

72	Deck #1
73-75	Subject #_ _ _
76-78	Sample #0 0 2
79-80	Other rooms 0 6

Name____

1 1. Was there a special room that was "yours", e.g. a bedroom, workshop, attic, den, garage, etc.

1_______yes
2_______no

3-4 2. If yes, which one was it?

____

6 3. How often did you use it?

1_______every day
2_______a couple of days a week
3_______once a week
4_______less than once a week

8 4. Did others feel free to use it, too, when you were there?

1_______yes
2_______no

10 5. When you were not there?

1_______yes
2_______no

12 6. Did your father have a special room?

1_______yes
2_______no

14-15 7. If yes, which one was it?

____

17 8. How often did he use it?

1________every day
2________a couple of days a week
3________once a week
4________less than once a week

19 9. Did others feel free to use it when he was there?

1_______yes
2_______no

21 10. When he was not there?

1_______yes
2_______no

23 11. Did your mother have a special room?

1_______yes
2_______no

25-26 12. If yes, which one was it?

____

28 13. How often did she use it?

1_______every day
2_______a couple of days a week
3_______once a week
4_______less than once a week

30 14. Did others feel free to use it when she was there?

1_______yes
2_______no

32 15. When she was not there?

1______yes
2______no

34 16. Was the kitchen used for anything besides cooking and eating?

1_______yes
2_______no

36-37 17. If yes, what?____
____
____
____

39 18. If you had a dining room was it used for anything besides eating?

1_______yes
2_______no
3_______not apply

41-42 19. If yes, what?____
____
____

44-47 20. Now focus on the living room. Draw a large layout including and labeling major pieces of furniture including tables, chairs, lamps, couch, TV, record player, radio, bookcases, windows, doors, etc.

49-50 21. If persons usually sat in certain chairs or places on the couch in the living room, indicate on the diagram who usually sat where. If people usually sat anywhere, write "random seating" on a corner of the diagram.

22. What things did you usually do in the living room?

52 ______TV
53 ______music
54 ______games
55 ______conversation
56 ______entertaining
57-58 ______others, specify______________________

____
____
____

60-61 23. With whom did you usually do them?

01______no one in family
02______everyone in family
______certain persons, including friends, who?__________
____
______other, specify______________________
____

ECO-2 Questionnaire

72	Deck #2
73-75	Subject #_ _ _
76-78	Sample #0 0 2
79-80	Other rooms 0 6

Name________________________________

1-4 24. If your home had a den, family or recreation room, workshop or other rooms, draw a layout including and labeling major objects, closets, doors and windows. If certain places or chairs in a room were typically used by a certain person indicate the place and person. Specify what kind of things you usually did in each room and with whom. Draw each diagram on a separate page and label it.

Other rooms (cont'd.)

Other rooms (cont'd.)

166 **Other rooms (cont'd.)**

Other rooms (cont'd.)

6-7 25. Where in the house did you usually go when you wanted to be alone?

____

26. When you were home and had free time what did you usually do?

9 _______watch TV
10 _______read
11 _______listen to music/radio, records, stereo
12 _______conversation
13 _______yard work
14 _______exercise
15 _______sports
16 _______work on house
17 _______work on the car
18-19 _______other, specify______________________________
____

21-22 27. In which room(s) did you usually spend your free time?

____

24 28. Did you spend your free time at home doing things with others?

1_______yes
2_______no

26-27 29. If yes, with whom?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?____________
____
_______other, specify______________________________
____

30. What sorts of things did you do at home on weekends or to celebrate special occasions such as birthdays, anniversaries, etc.

29 _______eat together
30 _______family conversation
31 _______party or invite people over
32 _______play games
33 _______watch TV
34 _______listen to music
35-36 _______other, specify______________________________
____

38-39 **31.** Where did you usually go after dinner was over and the dishes done?

01_______your bedroom
02_______living room
03_______den
04_______rec room/family room
05_______yard
06_______out of the house
_______other, specify____
____

32. What did you usually do there?

41 _______study
42 _______read
43 _______conversation
44 _______listen to music/radio
45 _______TV
46 _______sports
47-48 _______other, specify____
____

50-51 **33.** Who else was usually there with you?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?____________
____
_______other, specify____
____

53 **34.** Where did your mother usually go after dinner was over and the dishes done?

1_______her bedroom
2_______living room
3_______den
4_______rec. room/family room
5_______yard
_______other, specify____
____

Other rooms (cont'd.)

35. What did she usually do there?

55 _______read
56 _______conversation
57 _______listen to music/radio
58 _______TV
59 _______sew
60-61 _______other, specify________________________________
____

63-64 36. Who else was usually there with her?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
____
_______other, specify________________________________
____

ECO-2 Questionnaire

72	Deck #3
73-75	Subject #___
76-78	Sample #0 0 2
79-80	Other rooms 0 6

Name______________________________

1-2 37. Where did your father usually go after dinner was over and the dishes done?

01_______ his bedroom
02_______ living room
03_______ den
04_______ rec. room/family room
05_______ yard
06_______ workshop
_______ other, specify______________________________

38. What did he usually do there?

4 _______ read
5 _______ conversation
6 _______ listen to music/radio
7 _______ TV
8 _______ repair or make things
9-10 _______ other, specify______________________________

12-13 39. Who else was usually in the room with him?

01_______ no one in family
02_______ everyone in family
_______ certain persons including friends, who?______________________________
_______ other, specify______________________________

15-16 40. Where did your brothers usually go after dinner was over and the dishes done?

01_______ their bedrooms
02_______ living room
03_______ den
04_______ rec. room/family room
05_______ yard
06_______ out of the house
_______ other, specify______________________________

41. What did they usually do there?

18 _______study
19 _______read
20 _______conversation
21 _______listen to music/radio
22 _______TV
23 _______sports
24-25 _______other, specify_______________________________________
____

27-28 42. Who else was usually in the room with them?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?_______________
____
_______other, specify_______________________________________
____

30 43. Where did your sisters usually go after dinner was over and the dishes done?

1_______their bedroom
2_______living room
3_______den
4_______rec. room/family room
_______other, specify_______________________________________
____

44. What did they usually do there?

32 _______study
33 _______read
34 _______conversation
35 _______listen to music/radio
36 _______TV
37-38 _______other, specify_______________________________________
____

40-41 45. Who else was usually in the room with them?

01_______no one in family
02_______everyone in family
_______certain persons including friends, who?__________
_______other, specify__________

46. What regular jobs around the house were strictly your responsibility?

43 _______lawn or yard work
44 _______trash or garbage duties
45 _______bedroom care
46 _______house maintenance e.g. repairs, painting, etc.
47 _______care of pets
48 _______car repairs or maintenance
49-50 _______others, specify__________

47. Which jobs around the house did you usually share with others?

52 _______lawn or yard work
53 _______trash or garbage duties
54 _______bedroom care
55 _______house maintenance e.g. repairs, painting, etc.
56 _______care of pets
57 _______car repairs or maintenance
58-59 _______others, specify__________

61-62 48. How was it decided who would do which jobs?

ECO-2 Questionnaire 173

72	Deck #4
73-75	Subject # _ _ _
76-78	Sample #0 0 2
79-80	Other rooms 0 6

Name ________________________________

1 **49.** When a person, e.g. your father, had good news for the family, was there a particular place where it was told?

1 ______ yes
2 ______ no

3-4 **50.** If yes, where? ________________________________

6-7 **51.** To whom was good news usually told first?

01 ______ mother
02 ______ everyone at the same time
03 ______ whoever happened to be around at the time
______ other, specify ________________________________

9 **52.** Was there a particular place where bad news was told?

1 ______ yes
2 ______ no

11-12 **53.** If yes, where? ________________________________

14-16 **54.** To whom was bad news told first?

01 ______ mother
02 ______ everyone at the same time
03 ______ whoever happened to be around at the time
______ other, specify ________________________________

18-19 **55.** If you did something wrong who usually reprimanded you?

____

21 56. Was there a certain room where this typically occurred?

1________yes
2________no

23-24 57. If yes, which room?____
____

26-27 58. Who else was usually present?

01________no one
02________whoever happened to be in the room at the time
03________everyone
________other, specify________________________________
____

APPENDIX B

ITEM FREQUENCY DISTRIBUTIONS

TABLE 1

Subject Characteristics

	Per Cent Ss
Age	
17	4
18	17
19	28
20	26
21	11
22-28	12
Education	
Less than high school	16
High school	46
1-2 years college	29
Educational Goals	
College	54
Other schools	16
No more schooling	30
Career Plans after Navy	
Managerial, professional	49
Semi and skilled craftsman/worker	22
Service worker	4
Salesman, secretary, bookkeeper	3
Mobility/Travel	
Low (every couple of years or less)	28
Medium (once a year)	42
High (every few months)	29

TABLE 2

Parent Characteristics

	Per Cent Fathers	Per Cent Mothers
Birthplace		
Eastern, Central and South Atlantic	75	76
Other places in United States	19	20
Abroad	3	1
Unknown	3	3
Age		
Less than 40	4	15
40-50	50	59
More than 50	36	24
Deceased	9	2
Grades Completed in School		
Less than 12	43	32
12	33	48
More than 12	18	16
Don't know	6	4
Father's Occupation		
White collar	69	
Managerial, professional	18	
Service worker	6	
Unskilled worker	4	
Don't know	2	
Mother's Occupation		
Housewife		44
White collar		31
Managerial, professional		8
Other type of employment		17

TABLE 3

Geographic Characteristics of Family Homes

	Per Cent Ss
Location of Family Home in United States	
Eastern, East Central and South Atlantic	80
Other	20
Time Lived in Referent Home	
4 years or less	32
5-11 years	33
Greater than 11 years	35
Type of Area	
City	27
Town	27
Suburb	26
Rural	20
Population of Area	
More than 250,000	12
100,000-250,000	10
25,000-100,000	24
2,000-25,000	38
Less than 2,000	14
Lot Size	
Less than 1/4 acre	25
1/4-1/2 acre	37
More than 1/2 acre	31
Location of Nearest Neighbor	
Less than 100 feet	76
More than 100 feet	24
Location of Grocery from Home	
Less than 1/4 mile	38
1/4-1/2 mile	22
1/2-1 mile	24
More than 1 mile	15
Distance to Nearest Movie from Home	
Less than 1 mile	45
More than 1 mile	53

TABLE 3, cont.

	Per Cent Ss
Number of Blocks from Friend's Home	
Less than 1	28
1-5	37
6-20	21
More than 20	14

TABLE 4

Specifications of Family Homes

	Per Cent Ss
Rooms in Home	
Dining room	76
Study, den, sewing or sitting room	33
Recreation or family room	29
Screened porch	4
Garage or carport	60
Basement	53
Attic	50
Laundry	10
Number of Entrances to Home	
1	4
2	46
3	42
4	5
5	2
Number of Bedrooms	
2	16
3	54
4	24
5 or more	6
Number of Bathrooms	
1	49
1-1/2	44
2 or more	7

TABLE 5

Entrance to the Home

Front Door Entrance	Per Cent Use
Subject	37
Brother	23
Sister	35
Mother	42
Father	29
Neighbors	51
Parents' guests	74
Subject's friends	46
Delivery/salesmen	74

TABLE 6

Use of Front, Back, and Side Entrances to the Home

	Per Cent Front Door	Per Cent Back and Side Doors
Subject	37	41
Brother	23	25
Sister	35	18
Mother	42	36
Father	29	38
Neighbors	51	34
Parents' guests	74	13
Subject's guests	46	37
Salesmen/delivery	74	15

TABLE 7

Subject's Bedroom

	Per Cent Ss
Shared Bedroom	
Bedroom shared	37
Bureau shared	30
Bureau shared, each with specific territory	22
Closet shared	43
Closet shared, each with specific territory	23
Bedroom Shared or Not	
Not shared	62
Shared with one brother	31
Shared with more than one brother	3
Bedroom Use	
Recreation	71
Studying	67
Entertaining	63
Best Feature of Room	
Objects in room	34
Arrangement of room	10
Space	24
Privacy	22
Physical aspects of room	9
Least Liked Feature of Room	
Objects in room	16
Arrangement of room	2
Not enough space	32
Not enough privacy	14
Physical aspects of room	15
Other	21
Bedroom Door Open	
When in bedroom	50
When out of bedroom	73
Never open	34
Never shut	14

TABLE 8

Use of Bedroom Door by Subjects

Activity	Per Cent Open	Per Cent Shut
Sleeping	33	55
Studying	20	53
Recreation	33	33
Entertaining	73	21

TABLE 9

Care of Subject's Bedroom

	Per Cent S	Per Cent S's Mother	Per Cent Others
Cleaning	34	33	16
Bed Making	34	33	7

TABLE 10

Use of Bedroom Doors by Family Members

Specific Activities	Per Cent Open	Per Cent Shut
Parents		
Most things	29	13
Sleeping	10	19
Dressing	2	19
Recreation	8	1
Brother		
Sleeping	54	47
Studying	74	46
Recreation	58	28
Entertaining	59	27

TABLE 11

Bedroom Door Open

	Per Cent Time
Parents' Bedroom Door	
When in bedroom	48
When out of bedroom	78
Brother's Bedroom Door	
When in bedroom	63
When out of bedroom	84

TABLE 12

Subject's Visiting Others' Bedrooms

	Per Cent Ss
Frequency of Visiting Parents' Bedroom	
Daily	42
Twice a week	36
Once a week or less	18
Purposes of Visiting Parents' Bedroom	
Conversation	76
Study	4
Borrow or return objects	75
Read	8
TV, music	13
Frequency of Visiting Brother's Bedroom	
Daily	65
Twice a week	9
Once a week or less	2
Purposes of Visiting Brother's Bedroom	
Conversation	84
Study	16
Borrow or return objects	72
Read	16
TV, music	30
Frequency of Visiting Sister's Bedroom	
Daily	38
Twice a week	24
Once a week or less	8
Purposes of Visiting Sister's Bedroom	
Conversation	83
Study	11
Borrow or return objects	78
Read	12
TV, music	33

TABLE 13

Family Bedroom Door Knocking Behavior

Knocking Before Room Entered	Per Cent Time by No One	Per Cent Time by Everyone	Per Cent Time by Combinations	Per Cent Time Not Known
Subject's Bedroom	32	32	28	--
Parents' Bedroom	12	76	5	--
Brother's Bedroom	1	14	18	67
Sister's Bedroom	8	38	11	43

TABLE 14

Use of the Bathroom

	Per Cent *Ss*
One bathroom (all used and shared)	80
No policy on order of use	95
Allowing Others in Bathroom: General Use	
Yes	90
No	10
Allowing Others in Bathroom: Specific Use	
Shaving, combing hair	
Everyone	70
No one	1
Dressing	
Everyone	9
No one	28
Showering, bathing	
Everyone	14
No one	46
Using the toilet	
Everyone	5
No one	65
Knocking on bathroom door when closed	
All members of family	80
Subject himself	87

TABLE 15

Use of Bathroom Doors: General Use

	Per Cent Ss
Always shut	38
Sometimes open, sometimes shut	62

TABLE 16

Use of Bathroom Doors: Specific Use

Activity	Per Cent Ss
Shaving, combing hair	
Door open	78
Door shut	22
Dressing	
Door open	8
Door shut	62
Showering, bathing	
Door open	3
Door shut	96
Using the toilet	
Door open	1
Door shut	99

TABLE 17

SPECIAL ROOMS

	Per Cent Ss
Father's Special Room	
Den, study	8
Workshop	11
Attic, basement	1
Other	20
Father's Special Room: Frequency of Use	
Daily	78
Twice per week	21
Father's Special Room: Availability to Others	
With father present	80
With father absent	65
Mother's Special Room	
Bedroom	19
Den, sewing room, study	3
Utility	9
Other	12
Mother's Special Room: Frequency of Use	
Daily	89
Mother's Special Room: Availability to Others	
With mother present	81
With mother absent	74

TABLE 18

Family Meals

Frequency of Eating Meals Together	Per Cent *Ss* Breakfast	Per Cent *Ss* Lunch	Per Cent *Ss* Dinner
Everyday/most days	15	14	73
Twice per week	22	25	
Hardly ever	63	61	

TABLE 19

Location of Family Meals

	Per Cent S's Dining Room	Per Cent S's Kitchen
Family Meals - Regular		
Breakfast	28	72
Lunch	29	62
Dinner	44	48
Family Meals - Guest Present		
Family guest	69	22
Subject's guest	47	41

TABLE 20

Table Shape and Meal Time Seating Patterns

	Per Cent Ss
Table Shape	
Rectangular or oval	77
Square or circular	20
Fixed Seating Patterns	
When family eating together	79
When eating separately	40
When guests present	22

TABLE 21

Seating Locations at Meals

Family Member	Per Cent End	Per Cent Corner	Per Cent Center	Per Cent Other Combinations
Father	73	20	7	--
Mother	39	43	18	--
Children	8	20	10	62

TABLE 22

Family Meal Preparation

Activity	Per Cent S's Mother	Per Cent S's Sisters
Preparing meal	84	46
Setting table	55	39
Washing dishes	51	30

TABLE 23

Free Time Activities

	Per Cent *S*s
Subject's Free Time Activities at Home	
TV	76
Reading	48
Music	85
Conversation	43
Work (yard)	26
Sports	40
Work (house)	13
Work (car)	53
Where Free Time Was Spent at Home	
Bedroom	16
Living Room	20
Den, sewing room, study, office	5
Recreation room, family room	4
Attic or basement	2
Other	5
More than 2 rooms	11
Living Room Activities	
TV	67
Music	57
Games	33
Conversation	91
Entertaining	86
With Whom Free Time Was Spent	
Everyone in family	32
Friends, guests, neighbors or relatives	12
Everyone in family and friends or guests	14
With Whom During Living Room Activities	
No one in family	4
Everyone in family	29

TABLE 24

After Dinner Free Time Activities

	Per Cent Ss	Per Cent S's Mother	Per Cent S's Father	Per Cent S's Brother	Per Cent S's Sister
After Dinner Activities					
TV	48	20	64	60	65
Reading	15	49	33	13	30
Music	35	73	16	23	48
Conversation	31	18	44	35	51
Sports	24			44	
Work (yard)					
Work (house)			16		
Work (car)					
Study	15			17	24
Location of Activities					
Bedroom	5	5	4	1	25
Living room, den or family room	23	66	54	15	26
Other places	9	14	11	12	2
Out of house	37	2	4	17	2

TABLE 25

Job Sharing

	Per Cent Ss
Sole Job Responsibility	
Yard	29
Trash	30
Bedroom	33
House maintenance	12
Pets	10
Car repairs	31
Shared Job Responsibility	
Yard	48
Trash	42
Bedroom	35
House maintenance	59
Pets	32
Car repairs	31